CORE PLANNING IN NINE MAJOR NORTH AMERICAN CITIES

September 1981

ABOUT THE COREPLAN AND THIS REPORT

The Vancouver core is the heart of Canada's third largest metropolitan region. Centred on the downtown, the core also includes the West End, False Creek, Central Broadway, and the inner-city neighbourhoods of Strathcona, Grandview-Woodland, Mount Pleasant, Fairview, and Kitsilano.

The core is now changing very rapidly, and change may accelerate in the future. Some of this change will be produced by major projects such as B.C. Place and ALRT, but most will come as the cumulative result of lots of smaller changes -- none being very significant individually but all adding up to a much different core and a much different Vancouver. Change at the core will affect the whole city and the entire Vancouver region.

The Coreplan is an attempt to understand and deal with the consequences of this change. It is a program for monitoring change and its implications, a strategy for managing change in Vancouver's interests, and a basis for discussing and deciding about change as it affects our future.

This background report is one of a series produced in preparation of the Vancouver Coreplan. These reports review existing plans and policies, prospects for growth and change, community values, and other matters which have a bearing on the future of the core and on the future of Vancouver as a whole.

Each background report represents the work of particular individuals or firms. The principal author of this report was Poyin Auyeung.

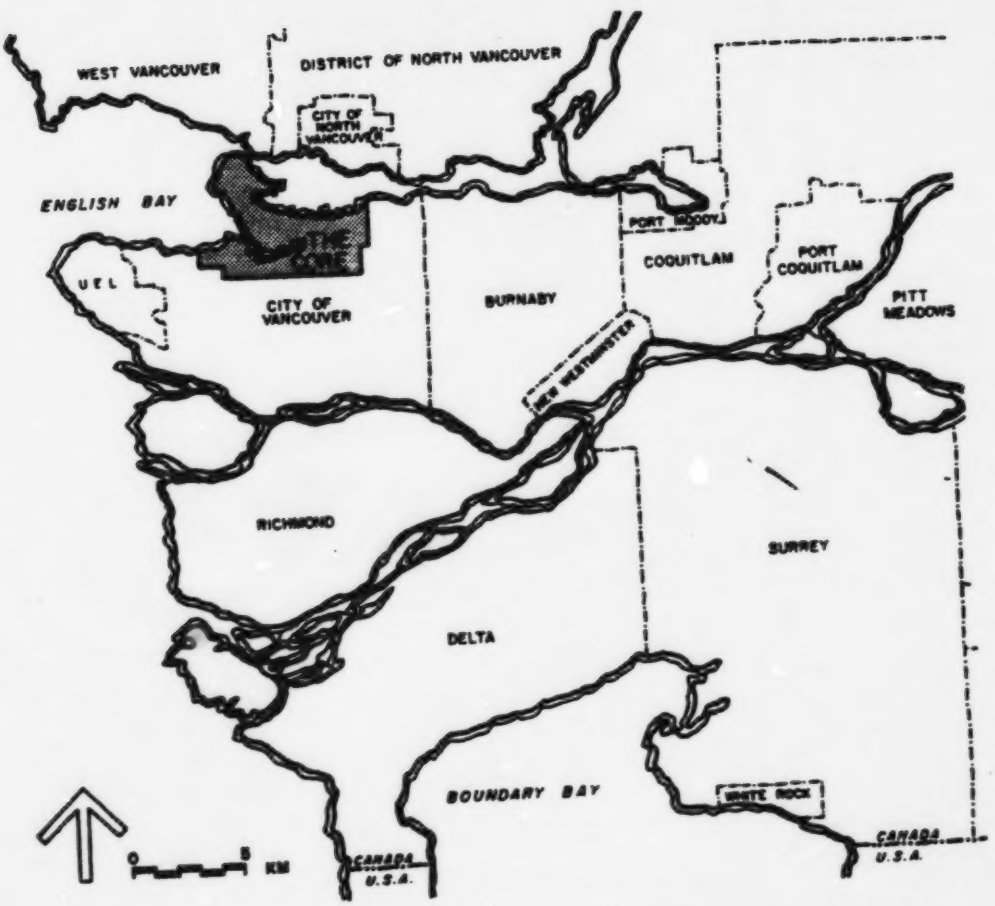

WEST VANCOUVER
DISTRICT OF NORTH VANCOUVER
CITY OF NORTH VANCOUVER
ENGLISH BAY
PORT MOODY
COQUITLAM
PORT COQUITLAM
PITT MEADOWS
U.B.C.
CITY OF VANCOUVER
BURNABY
NEW WESTMINSTER
RICHMOND
SURREY
DELTA
BOUNDARY BAY
WHITE ROCK
CANADA
U.S.A.
0
5
KM
CANADA
U.S.A.

TABLE OF CONTENTS

1/ Introduction - Objective of the Report 1

- Organization of the Report 1

11/ Overview 2

111/ Survey Cities - Calgary 5

- Edmonton 13

- Toronto 21

- Denver 30

- Houston 35

- Minneapolis 40

- Portland 44

- San Francisco 48

- Seattle 59

- List of Contacts 66

INTRODUCTION

Objective of this Report

This report provides a collection of materials on downtown (core) planning in nine major North American cities. It identifies the major planning issues, policies, and implementation tools used to resolve these issues, and also the successes and failures in solving them.

This document provides a reference for the Vancouver Coreplan project, specifically in relation to the subjects of growth options, policies, and implementation strategies.

Organization of this Report

Information contained in this report is based upon telephone interviews with city planners of the selected cities, planning documents sent by the cities, and other documents found in the Vancouver City Planning Library and the GVRD Planning Library.

There is more information available on certain cities than there is for others. Discrepancies among quantities of information presented do not necessarily mean that there is more planning activity in any one city than the others.

On the whole, identifying the major issues, policies, and plans for each city was not too difficult. However, information regarding implementation tools and their effectiveness is not readily available for many reasons. The implementation of plans and policies may not be well documented and monitored. Very often there is a lack of implementable programs to effect plans and policies. Where programs exist, they are seldom monitored or explicitly evaluated, but for most of the cases studied, it is too early to evaluate recently implemented programs.

In order to present information which will be useful and relevant to the Coreplan study, this report focuses on issues that are major concerns of Coreplan analysis. These issues are employment, housing, and transportation, and particularly the inter-relationships among them.

OVERVIEW

EMPLOYMENT

All of the cities surveyed have been experiencing a great deal of economic growth downtown, particularly in office development. With the exception of Toronto, all of them have not attempted to reduce downtown office growth by using public control mechanisms. Although a few cities have intentions to decentralize some downtown office growth, no explicit implementation strategies have been enforced to achieve this objective.

With the intent of redistributing some core office growth to regional sub-centres, Toronto has down-zoned office development capacity in the Central Area. Correspondingly, in some regional centres, commercial density limits have been relaxed.

San Francisco is another exception for different reasons. This city has implemented two proposals requiring developers to contribute housing units and contribute to a transportation fund according to the quantity of office floor space built. However, according to some in the San Francisco Planning Department, these proposals will not reduce office growth because demand for office development is too great to be affected. The intention of these proposals is not to discourage office growth, rather they are supposed to mitigate the negative impacts resulting from that growth.

HOUSING

Based on this survey, all of the cities, with the exception of Houston, have chosen to encourage housing downtown, and many of them have implemented programs to achieve this objective. Also, most have chosen to develop a compact downtown, with intensive office development and more housing instead of distributing downtown office development more evenly to regional sub-centres.

Most of the programs used for encouraging housing are incentive based, such as granting bonuses where development provides housing, or offering financial assistance to new housing or rehabilitation. Several cities have established "housing zones", usually located in mixed-use areas, where the inclusion of a certain amount of housing is mandatory. For instance, Toronto in 1976 up-zoned downtown housing development capacity and created some mixed-use zones with specific housing units and other housing related requirements. Portland introduced an AX Zone in their downtown where 60% of every development must be housing.

Houston is the only place where housing is not actively encouraged in the downtown. With no zoning and the relatively minor role that local public land use controls play in real estate development, Houston's growth trends have been primarily determined by the market mechanism . The resultant trend is high density downtown office development, coupled with low density suburban residential sprawl. Some studies suggest that downtown housing demand in Houston is very low.

TRANSPORTATION

Transportation poses the greatest problem and challenge to the management of growth. It is a common perception among most of the cities that transportation facilities could be or will be expanded to accommodate growth. Toronto is an exception. According to their 1976 Plan, transportation capacity in the Central Area was accepted to be fixed as of 1976 and additional growth had to conform to this transportation capacity.

Calgary, Edmonton, Toronto, and San Francisco already have rapid transit systems in operation. Houston, Seattle, and Denver are planning for rail transit. Public transit improvements and expansion are a top priority in transportation policies for all cities which intend to expand transportation facilities. Automobile oriented transportation has a low profile. Even a highly auto-oriented city like Houston, with a transit ridership of 2%, plans to encourage public transit.

LINKAGES BETWEEN EMPLOYMENT, HOUSING AND TRANSPORTATION

Many of the cities studied acknowledge the inter-relationships of employment, housing and transportation and that additional downtown employment puts pressure on housing and transportation services. This recognition is reflected in their analysis of transportation demand, and in their common perception that increasing housing supply downtown may reduce the distance between home and work, thus reducing travel demands.

However, very few cities have dealt with these inter-relationships explicitly from the standpoint of implementation measures. That is, many implementation mechanisms or programs do not directly tackle these inter-relationships, or the dynamic nature of these inter-relationships. Many programs still address employment, housing and transportation separately. San Francisco's recently adopted development strategy is a new approach to handling these linkages. The transportation levies and housing quotas imposed on new office development do address the dynamic nature of the interaction of employment, housing, and transportation.

In San Francisco there is no constraint or limit placed upon employment growth per se. Employment growth is permitted as long as the negative impacts are significantly reduced. Theoretically, employment growth proceeds in co-ordination with transportation and housing demand. Or, in other words, the pace of employment growth may become more in tune with the pace of housing and transportation demand.

Although the requirements are directed specifically at office development, it is interesting to note that in the San Francisco proposals, nothing has been mentioned regarding office development capacity or down-zoning, or any explicit limit on office development. This approach may have its own flaws, but it does offer an alternative to an "end-state" planning approach, where a desired future or end-state is expressed without enough attention to the pace of change or the dynamics involved in reaching that future.

On the other hand, Toronto's deconcentration of office growth has been quite successful. The basic strategy used was down-zoning downtown office development capacity in 1976. According to a Central Area Planner, the success of Toronto's deconcentration is not merely due to down-zoning, but could be due to many other factors. For instance, it is important that there is co-ordination between downtown/city policy to deconcentrate and, at the same time, a regional policy to absorb and encourage regional office growth. If there is active encouragement and adequate resources devoted to developing attractive regional centres, developers are more willing to support growth. Besides, downzoning downtown has raised land values and office rents. Thus, the competitive advantage of developing in the region will likely increase.

GAPS BETWEEN POLICY AND IMPLEMENTATION, AND BETWEEN IMPLEMENTATION AND EVALUATION

In many of the cities surveyed, a gap exists between policy and implementation. There are no implementable strategies for many policies and objectives. Decentralization of office growth to the region is a policy that is most deficient of implementation tools. Meanwhile, the encouragement of housing downtown, using a bonus system, usually results in slow progress.

In cases where there are programs to implement policies, there is a lack of evaluation or monitoring procedures to assess the effectiveness of these programs. Without evaluation, it is almost impossible to find out whether a program/policy is succeeding in achieving its objectives and whether additional programs or different approaches are needed. The 1976 Toronto Plan established annual targets for housing development and a monitoring process for both housing and office development. These are critical components of any plan. These monitoring exercises facilitate evaluation, and evaluation allows ongoing revision of programs, policies and objectives. Without implementation, policies and objectives may never materialize. Furthermore without evaluation of programs and policies, the worth of the planning process is in doubt. The remainder of this report documents the planning experience in the downtown for each of our case study cities.

CASE STUDIES

CALGARY

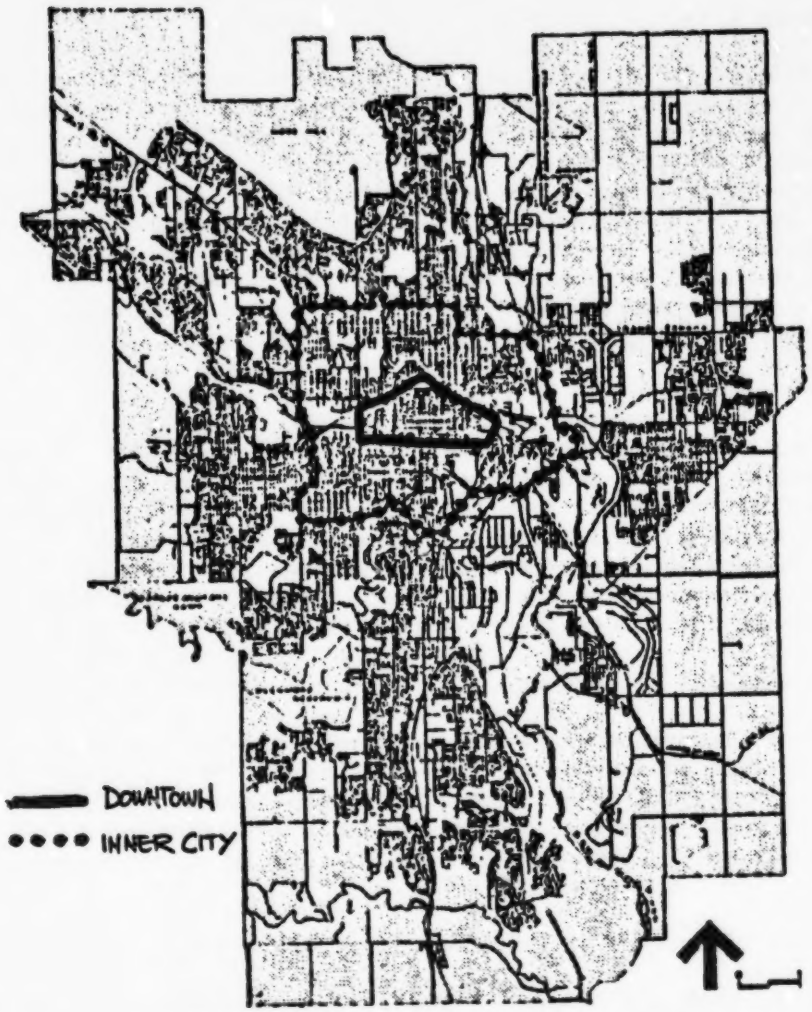
Documents Reviewed

- Revised Proposed Inner City Plan; March 1979 (Proposed)
- Calgary General Municipal Plan; November 1978 (Adopted by Council)
- A Decision Now for the Future; 1977 (Adopted)
- Evaluation of Alternative Growth Strategies; 1977 (Adopted)

Critical Issues

- Population decline
  - The inner city has been losing population. The result is an outward growth of suburban residential development. Thus, community and city resources are underutilized. This pattern also implies increased public expenditures for accommodating suburban transportation needs.
- Decline in families with children
  - The city, especially the downtown has been losing families with children. The inadequate supply of family housing in downtown, together with the high density residential development in the downtown area, have discouraged families with children. This means a smaller household size, a decrease in the diversity of population in the downtown, and further reinforcement of the trend toward a specialized downtown.
- Instability
  - Redevelopment activities have induced physical, demographic, social, and environmental changes to the downtown. Residential redevelopment tends to require relocation of low and moderate income households to the suburbs. Commercial redevelopment stimulates commercial activities, but it also means additional employees, additional travel, and could have serious implications for the quality of the environment in the city.

CALGARY



INNER CITY STUDY AREA

3

Source : Revised Proposed Inner City Plan
Calgary Planning Dept. Mar. 1979

CALGARY:

Growth Policy - Scenarios

. Compact City

- This scenario emphasizes limited outward growth and massive increases in residential densities within the existing built up area, which includes the downtown and the inner city. The downtown would remain as the focus of the region in terms of being the major location for office employment, cultural and commercial activities. This pattern would allow more people to live in the downtown and inner city areas. Of the 127,000 population increase projected over a ten year period, the downtown and inner city would accommodate 80,000 and two outlying areas would share the remaining 47,000. Public transit will be a priority.

. Modified Trend

- The existing trend of outward population growth would continue, while downtown remains as the focal point for employment growth. The car will be the major means of movement. The existing modal split would persist. There would be a slight increase in residential densities along mass transit corridors. The projected population growth would be distributed among four outlying areas to the north and south of the inner city.

. Decentralized Employment

- This scenario would allow downtown employment to grow slightly above what has already been committed. New office development would be encouraged to locate in outlying designated areas. Traffic would be dispersed and people would likely live closer to their places of employment. Opportunities for the use of cars would be greater than with any other scenario.

. Maximum Efficiency of Investment and Resources

- Here, emphasis is placed upon economic efficiency in the use of land, transportation, and community facilities. The distribution of population, location of employment growth, and residential densities would be based upon the efficient use of existing infrastructure and investment. Transit usage and traffic management programs would be the priority. The downtown and the inner city would accommodate a considerable share of employment and resident growth, but the total impact on the inner city would not be as strong as in the Compact City Scenario. The inner city would allow a population growth of 55,000 and the rest of the region would accommodate the remaining portion of the projected growth.

. Conservation and Rehabilitation

- Growth and development would be directed outside the inner city. As a result, conservation and rehabilitation of old housing and historic buildings could be maximized. Traffic management would be the priority. An expected consequence would be neighbourhood stabilization.

. Price of Housing

- Under this scenario, attempts would be made to minimize the rate of increase in housing prices for both owner-occupied and rental accommodation. Two policies would be adopted to achieve the above. One is to ensure an oversupply of land by government land banking and the other is to encourage greater competition in land development. Residential development would be distributed in four outlying areas outside the inner city. The two policies designed for affecting the price of housing are more important than the actual location of the development.

As indicated in the Calgary General Municipal Plan (78), the adopted growth strategy is a combination of the Economic Efficiency and the Price of Housing Scenarios, which have been combined and renamed as the Balanced Growth Strategy. Decisions as to where development should take place are based upon the Economic Efficiency Strategy; and policies for discouraging increases in housing prices are adopted from the other scenario. Employment implications of the Balanced Growth Strategy are that the downtown would remain the primary office employment centre with 85-90,000 office workers by 1996, which is a 68% increase over the 1977 level. Some office employment would be encouraged to decentralize along mass transit corridors. Higher density development would be encouraged to occur along transit facilities.

Employment Growth

According to the Calgary General Municipal Plan (78), in 1976, 25% of the city's employment was located in the downtown; and almost 40% of it was in the combined inner city and downtown areas. In 1977, there were 52,000 employees in the downtown, it is estimated that there will be 85,000 to 90,000 employees in 1996. These employment projections are based upon the Balanced Growth Strategy, which allows for a 68% increase of downtown employment over the 1977 level. This projected increase is slightly lower than the trend. The total downtown working population for 1981 is estimated at 80,000. As of January 1981, a remarkable 17.6 million sq. ft. of office space is either under construction or being proposed to start in the near future.

The main approach to downtown employment growth policy is to more or less continue with recent trends of the employment growth rate, with some decentralization of employment outside downtown and along transit corridors. The target set by the Balanced Growth Strategy is not being seriously taken as a limit to determine future growth. Based on a floor space per worker rate of 250, current development of 17.6 million sq. ft. of office space can accommodate 70,400 office employees. By adding the 1981 estimate of 30,000, there would be 150,400 downtown employees. Note that the current development figure only refers to office growth. Obviously, the 1996 target of 90,000 total downtown employees would be exceeded in the near future.

Housing

The inner city has been losing population. Between 1970 and 1976, housing in the inner city decreased by 7.6%, while the downtown had a minor increase of 2.7%. The greatest increases occurred in the outer suburbs, located at the north and south-western parts of the city.

A major policy of the Calgary General Plan (78) is to increase population density in the inner city and in the downtown, especially along mass transit corridors. Calgary has a very low overall population density. 55-58% of the housing stock is single-family dwellings.

The City of Calgary is expected to grow to a population of 778,000, by 1996, meaning approximately 175,000 additional dwellings. Based upon trends over the past 5 years, the construction industry has been producing an annual average of 7,800 new units, and the City of Calgary appears confident that the industry is capable of meeting the projected demand.

Another major area of concern is the accelerating price of housing. The adopted policy is to reduce the rate of increase through encouraging greater competition in the development of land, lowering building costs, and ensuring an oversupply of land.

A third area of housing concern is to ensure that the inner city has a more balanced and stable population, with a more diverse housing mix that includes housing suitable for families with children.

Transportation

The transportation system in Calgary consists of roadways, buses, LRT, and an extensive pedestrian network of +15 walkways. The existing transportation system is almost at capacity and is expected to be severely overloaded in 5 years. The focus of employment growth in the downtown, coupled with outward development of low density residential suburbs, have created significant transportation problems in the peak periods. In 1979, transit ridership for work trips going to the downtown for the day was 44%.

The transportation policy is composed of two main elements: the provision of mass transit serving the central area; and the provision of a road oriented system serving the outer areas. Thus, movement from outer to inner areas, and movement within the inner areas will be facilitated by transit. Movement within and among the outer areas will be handled by roads.

Apart from adopting transportation policies, like expanding and improving transit and some traffic management schemes, there are policies which have a direct bearing on the relationship between land use and transportation. These policies have already been mentioned in the employment and housing section: to increase resident population density in the inner city, which may reduce the travel distance between home and work; to increase residential densities along major transit corridors, which may increase transit ridership; and to decentralize employment along transit routes so as to reduce traffic congestion in the downtown and inner city. Decentralization of downtown employment has been recognized as the main thrust of an integrated land use and transportation policy. However, according to data on current development trends, Calgary's downtown is still accommodating a large proportion of office growth, which extends far beyond the Balanced Growth target. This indicates a gap between policy and implementation. Either no implementable strategies have been designed, or the implemented strategies have not been effective.

Major Existing Land Use Controls and Zoning Tools

Floor Area Ratio (FAR)

- base FAR of 8, but higher with bonuses
- maximum FAR of existing buildings is 17.5

Bonuses

- Density bonuses are granted in exchange for public amenities e.g. +15 walkway system (these are also mandatory requirements)

- The present bonus system has generated very high densities of at least 15 FAR. Recently an application for 42 FAR was reviewed. The bonus system in Calgary is considered to be misused and is currently under review.

Height Limit

- Allows a maximum of 75.8 metres for developments near the Bow River, and in residential areas, otherwise there are no height restrictions in the rest of downtown.

Proposed changes to existing land use controls:

- A base FAR of 5, up to 10 with bonuses, and up to 14 in exceptional cases

- To establish performance standards (sunlight, building edges, uses, wall surfaces, envelopes, volumes, etc.)

Strategies/Programs

. Decentralization of employment outside downtown and along transit corridors:

  - Provisions for the establishment of new decentralized employment centres are included in Design Briefs for specific areas. Examination of possible locations for new employment centres will be dealt with in detail in future Policy Reports/Area Structure Plans/Area Redevelopment Plans. So far, the Calgary General Municipal Plan mainly deals with broader policy issues. The basic strategy is to vary the intensity of development according to transportation capacity.

. Increasing population density in the inner city and downtown:

  - Mainly done by upzoning residential areas in certain parts of downtown and the inner city, and through mixed use zoning.

  - Again, future Policy Reports/Area Structure Plan By-laws/Area Redevelopment Plan By-laws will be the main vehicles for implementing these policies in specific areas.

- A new development approval process which is more flexible and allows more discretion in the review of applications is to replace the former one. The development approval process directly controls residential density. Evaluation is based upon the 'Density Guidelines'. The Density Guidelines are used to guide the allocation of particular densities to specific areas. Residential densities will be increased according to community objectives, infrastructure, market forces, proximity to employment centres and mass transit, and other characteristics of specific areas.

. Reduction of the rate of increased housing prices:

- Encourage greater competition in residential land development. A study is being undertaken to determine the best way to implement this policy. An idea being discussed is that development companies could be required to have available on the market at any given time a specified number of serviced lots. Or that, development companies should disperse their activities more evenly within the city; to have more development companies involved in residential land development.

- Ensure an oversupply of land by government land banking.

- Reduce building costs by examining the potential for relaxing certain standards of building construction and adopting less labour intensive building methods.

. Transit improvements:

- Give priority to investment in public transit. Extend LRT from the downtown to the outer suburbs. Improve and extend the bus systems.

- Improve roadways and build new ones which will be required before 1966 to accommodate the development forecast by the Balanced Growth Strategy.

. Land use and transportation strategies are being dealt with in future specific area plans, and in residential density guidelines. Research studies are being undertaken to develop strategies for implementing this policy.

EDMONTON

Documents Reviewed

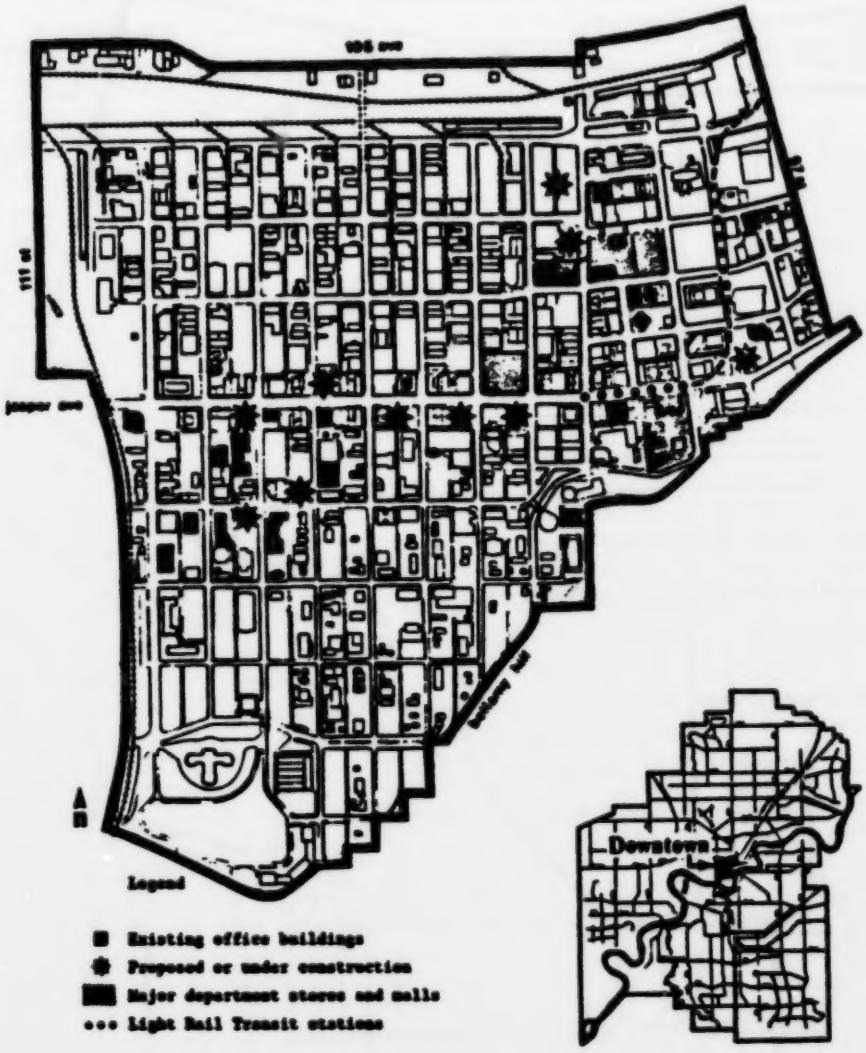
- Downtown Area Redevelopment Plan By-law; July 1981 (Proposed). Edmonton Planning Department.
- Downtown Area Redevelopment Plan Draft; Background Information, October 1980. Edmonton Planning Department.
- Downtown Land Use Controls; A Working Paper of the Downtown Area Redevelopment Plan. November 1980. Edmonton Planning Department.
- Edmonton General Municipal Plan; September 1979. (Adopted by Council). Edmonton Planning Department.
- Plan Process, Present Trends and Future Prospects; Working Paper No. 2 & No. 3. February 1979. Edmonton Planning Department.

Critical Issues

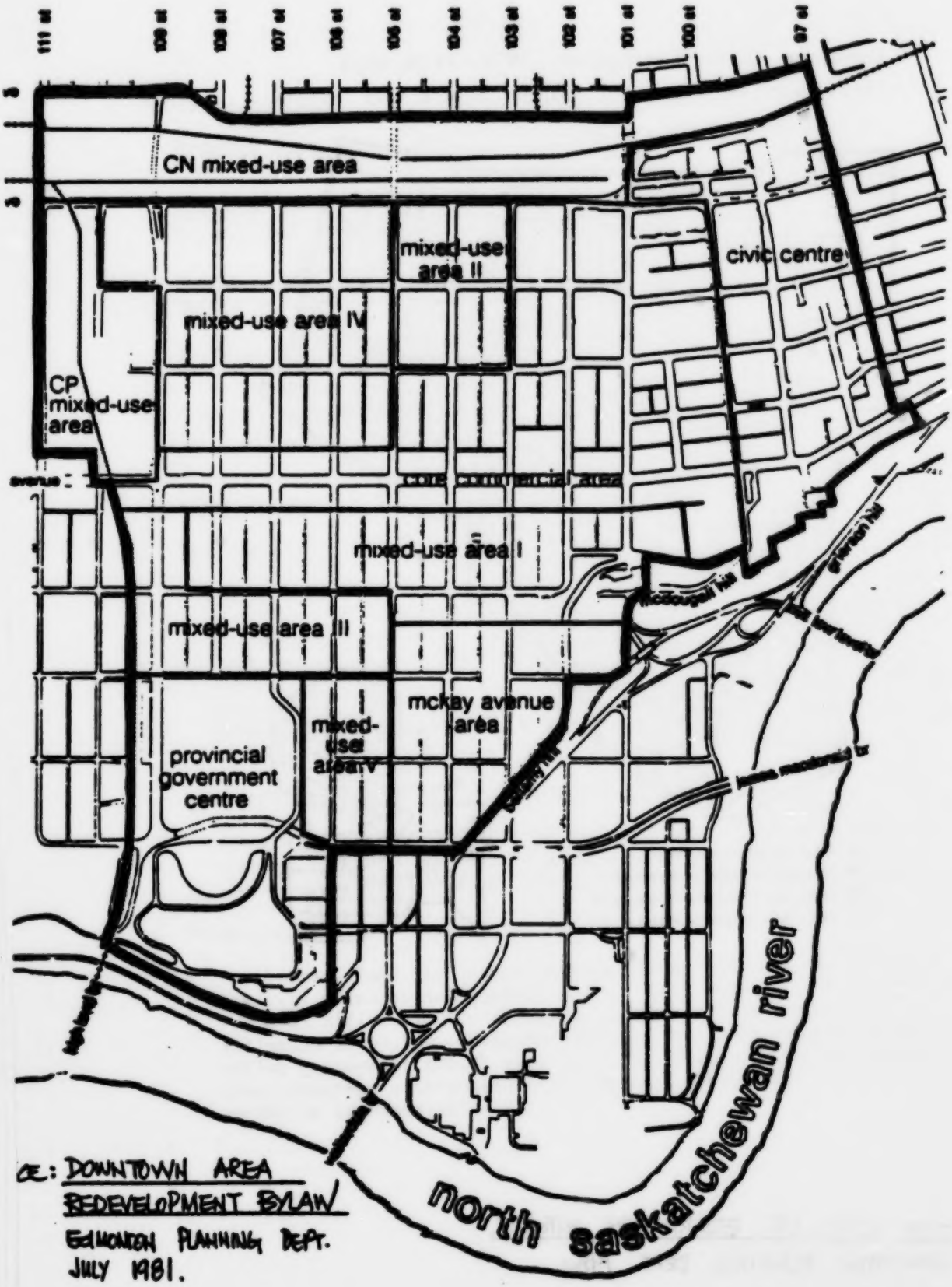
- Declining city population
  - Residential development has been primarily occurring in the outer suburbs. Between 1968 and 1972, 57% of regional housing growth was in the inner city, and 43% in the suburbs. However, between 1972 and 1977, only 16% occurred in the inner city and 84% in the suburbs. Downtown only has 1.3% of the city's total resident population. While the city's population increased by 70%, downtown only increased by 20%. This trend has led to inefficient utilization of existing services and facilities in the city.
- Increased specialization of the downtown
  - A high concentration of office development, a lack of variety of housing types and sizes, and a lack of affordable housing in the downtown are creating a more and more specialized downtown.
- Concentrated office development in downtown
  - The primary land use in the downtown is office. There is little activity after normal working hours. Downtown has 75% of the sub-regional office stock. Existing downtown office employment is estimated at 64,500. Between 1976 and 1981, the average annual office employment growth rate is 5.7%. Downtown office concentration, together with suburban residential growth, put a heavy burden on transportation.

EDMONTON

Downtown Office Development, 1970 - 1979, With Floor Area in Excess of 100,000 Square Feet



SOURCE: THE CITY OF EDMONTON, INFOPAK
EDMONTON PLANNING DEPT. 1980



CE: DOWNTOWN AREA REDEVELOPMENT BYLAW
EDMONTON PLANNING DEPT.
JULY 1981.

. Decline in retail/service development

- Downtown has 25% of sub regional retail space. Retail activities have relatively decreased inside downtown, and are increasing outside of downtown. Retail development in the downtown is not as attractive as it is in suburban shopping centres. It is believed that a lack of pedestrian malls and adequate short-term parking does nothing to stimulate retail activities.

. Transportation

- There is a need to increase transit ridership to, from, and within downtown. The pedestrianway system is incomplete. Existing roadways are becoming increasingly congested, though they are not yet at capacity. For work trips going to the downtown, transit ridership increased from 22% in 1971 to 34.3% in 1976. The existing transportation system serving downtown consists of arterial roads, buses, LRT, and pedestrianways. The main concern is the existing arterial roadway service.

. Insufficient land for residential and industrial development in the city

- It has been estimated that the supply of residential land will last until 1992. Declining industrial use in the city implies an imbalanced tax base whereby city residents have a heavier tax burden. This trend away from industrial employment also tends to narrow the range of job opportunities in the city.

Growth Strategy

According to the Edmonton General Municipal Plan (79), three growth alternatives were identified - Trend, Compact, and Concentrated.

. Trend

- The present trend toward high density office development in downtown and low density sprawl of suburban residential development would continue. There would be limited inner city redevelopment, except near LRT stations and unused zoning capacity. Suburban densities would remain the same.

. Compact

- There would be some decentralization of office space from downtown and moderate increases in residential densities in the suburbs and the inner city. Office space would be decentralized along LRT stations, in commercial strips, and industrial areas. High density apartment development would increase in the downtown, while townhouses and ground-oriented multiple dwelling development would increase in the inner city. Residential densities in the suburbs would be moderately increased.

. Concentrated

- Within the city of Edmonton, residential density would be increased and office development would be significantly decentralized. The city would capture most future regional growth. Downtown would no longer be the primary employment centre. There would be apartments, ground-oriented multiple family developments throughout the inner city, especially near the LRT and downtown. Suburban densities would also be increased by having more two family dwellings and small single family dwellings.

After an evaluation was done by civic departments and the public, the compact and concentrated growth scenarios have been adopted.

Existing policies for downtown growth

The General Municipal Plan (79) adopts numerous policies to guide growth and development in the downtown and the city:

Downtown

- Maintain and develop a viable and strong downtown.

- Decentralize office growth outside downtown to town centres, LRT stations, and other locations along major transportation routes.

- Adopt a downtown parking policy to encourage and support a viable downtown.

- Encourage the location of a significant portion of future demand for medium and high density housing in the downtown over the next 13 years.

City

- Accommodate whatever growth is attracted to the city.

- Provide multiple family housing and family housing in the inner city. Basically, increase the compactness of residential development. The city is expected to provide 75% of regional housing growth by 1991.

- Emphasize public transit by extending LRT, improving bus transit, and pedestrianways.

- Encourage industrial development in the city. The city is expected to accommodate about 50% of industrial growth in the sub-region.

Existing land use and zoning controls

The Edmonton Land Use Classification Guide, Zoning By-law and the General Plan By-law had been guiding city development until July 1980, when the Edmonton General Municipal Plan (79) and the new Land Use By-law were adopted.

In using the Land Use Classification Guide, the city's development officer had considerable discretion to modify and grant variances to a development. The Zoning By-law was more rigid in specifying site and building criteria. However, most of the downtown was regulated by the Guide.

Existing downtown land use regulations permit no as-of-right uses, meaning that each development is evaluated according to its own merits and its conformity with the Area Plan By-laws. Since downtown does not have an official plan, most developments are approved after complying with the density and use requirements of the old Land Use Classification Guide, and the downtown policies in the General Municipal Plan (78). This system provides density incentives, whereby increases in the FAR can be granted if developments provide certain amenities. However, a lack of physical guidelines has led to an urban design pattern that is a result of developers' interests and the development officer's discretionary judgement, rather than an overall objective for downtown.

A downtown housing study concluded that increased housing in downtown is unlikely to occur unless downtown residential densities are increased and more consistent controls are implemented. Under the Land Use Classification Guide, the permitted residential densities and resultant high land values pose a great deal of problem for residential development in downtown. Relatively low residential densities have to compete with the more profitable, higher density commercial development. A suggested

solution is to include commercial development in residential areas so as to allow the gains from commercial uses to offset losses from residential uses. This means mixed use zoning.

For commercial development, the Land Use Classification Guide provides enough commercial space in the downtown for development beyond the next 15 years. The General Municipal Plan projection of office growth over the next 10 years is 8.9 million sq. ft., while there is potential commercial space of 26.3 million sq. ft.

Implementation - Strategies and programs

The proposed Downtown Area Redevelopment Plan By-law (July 1981) is to provide a set of guidelines and land use amendments which direct development to specific areas within the downtown and conforming to the approved General Municipal Plan (79). This proposed plan is primarily designed to achieve the adopted policies of the General Municipal Plan.

The following strategies have been designed to achieve some of the objectives and policies of the General Municipal Plan:

- Annexation of additional land to meet the projected demand for housing, increase population density, and ensure an increased supply of land within the city.
- Encourage residential development by mixed use and exclusive residential zoning.
- Extend the LRT and some arterial roads in the downtown.
- Land use controls
  - 'as-of-right' densities for commercial and residential uses
  - encourage residential development through commercial density bonuses
  - minimum mandatory amenities
  - building envelopes for major streets
  - encourage heritage preservation through density bonuses and density transfers
  - minimum design controls to safeguard light, air, and privacy by highrise dwellers and create a more comfortable pedestrian environment.

Outcome of Programs

Most of the strategies mentioned earlier are still proposed and have not been implemented. According to a downtown planner in the Edmonton Planning Department, there is a lack of implemntable programs to resolve many of the concerns and adopted policies of the General Municipal Plan. The decentralization of office space outside of downtown is one of the more difficult and complex objectives to implement.

However, there have been some successes in certain areas. For example, housing development in the downtown is starting to experience some progress. About four or five major proposals for residential development are being reviewed.

The proposed new land use controls mentioned earlier are part of the proposed Downtown Area Redevelopment Commission and is waiting for Council's approval and public hearings.

TORONTO

Documents

- Proposals Report: Central Area Plan Review, Part I - General Plan -; October, 1975.

  - Summary.

- Central Area Plan Review. Part I - General Plan; October 1975. Toronto Planning Department. (Approved)

- City Monitor; 1981 Vol. 2, July 1981 Toronto Planning and Development Department.

  - "Housing Development, Prices, and Rents in the City of Toronto"- 1980.

- Central Area Plan By-law Amendment; 1976. Toronto Planning Department.

- Metroplan; Toronto Metro Planning Department. 1976.

  - Concept and Objectives.

- What kind of city? A Profile of Metro Toronto; Toronto Metro Planning Department; June 1974.

Critical Issues

- Population decline in the central area

  Between 1951 and 1971, there was a population decline of 20,000 although the number of housing units had increased. This implies a reduction in average unit size, smaller households,and more apartment development.

- A specialized central area

  Compared to 1951, residents in the central area in 1971 had become less diverse, with a younger population, with fewer families with children, and with fewer low income households. The function of the central area as a place of residence, community life,and industrial employment diminished and was taken over by its function as a specialized service centre serving larger area interests. The central area lost its diversity of residents and functions. This trend also implies a narrower range of employment opportunities in the central area.

- Employment growth increased relative to resident labour force

  Between 1960 and 1970, the central core's (see map pg. 23) share of employment growth increased in importance relative to the resident labour force. That means, in the central core, resident labour force growth did not keep up with employment growth. Again, for the larger core area, (map pg. 23), its share of office employment growth relative to resident labour force had not declined. Although for both areas, their shares of employment growth within the region have gone down. The employment to labour force ratio has important implications for work trip demand. Therefore, the measure of deconcentration should involve not only one variable, employment, but should take into account the employment to labour force ratio.

- Increased separation of home and work and the demand for transportation

  There is a concern about the ability of the existing transportation system to provide satisfactory service if the central area office growth rate continues, and if the current trend of outward residential growth persists.

  The existing transportation system serving the central area consists of rapid transit, buses, street cars and commuter rail. According to a Toronto Metro Planning Department survey, the modal split for peak hour travel to, from, and within the central area is 57% transit and 43% autos. Based on the Metropolitan Employment survey of 1974, employment for the central core was approximately 250,000, of which 165,000 were office employees. Based upon the assumption that current office growth trends will continue, the Metropolitan Toronto Transportation Plan Review projected that the existing transportation system serving the central area would be fully utilized at an employment level of 435,000 in the central area. The Metropolitan Planning Department projected that by 2001, central area employment would reach 460,000. By that time, the transportation system would be severely overloaded.

Growth Options

Basically, there were two growth options: concentration and deconcentration. A concentrated pattern of urban development emphasizes the downtown core as the primary centre for office growth, with little office growth for suburban centres. Another aspect of concentration is that employment growth in the core greatly exceeds the resident labour force in the core. This would mean that the trend of suburban residential sprawl would continue. Deconcentration emphasizes a pattern of metropolitan development based on planned sub-centres within the region. Employment and population growth would be more evenly distributed within the metropolitan area.

The Central Area Plan Proposal (1975) adopted the deconcentration option, whereby job opportunities would be evenly distributed within the region, and a multi-centered urban structure would be formed. With a structure, the distance between home and work would be reduced. Metroplan proposes the development of 15 multi-use centres over the next 25 years. Downtown, office employment would increase by about 50% from 1974 to 2001. In the rest of the region, office employment would double, increasing from 120,000 to 240,000 by 2001. The outer three municipalities (North York, Etobicoke and Scarborough) are projected to increase at an average of 10,000 jobs a year; whereas the inner three municipalities will increase at 6,000 jobs per year. The percentage of employment in the inner municipalities within the region will decrease from 56% in 1974 to 50% in 2001.

Growth Policies

The following is a list of some of the policies which were proposed in the Central Area Plan (1975) and which have been approved by City Council:

. Deconcentration of employment

Provide a deconcentration of office growth away from the central area at planned sub-centres within the metropolitan area.

. Office growth and transportation capacity

Ensure sufficient transportation system capacity to service employment growth. Existing transportation capacity in the central area, assumed to be fixed, will determine the amount of employment growth in the central area. Based upon the assumption that the existing transportation capacity would be fully utilized at 259,000 to 307,500 employees, the gross office floor area for the central area would be 70.5 million sq. ft. to 80 million sq. ft. In calculating the gross office floor area, an F.S.W. of 250 was used. Only office employment was accounted for because, after 1960, the increase in non-office employment, like hotels and institutions, was off-set by declines in retail and industrial employment.

According to this plan, office development density will be reduced to one half that previously allowed. This still provides for a 37%-59% employment increase, and a 60%-89% of office employment increase over the 1975 levels in the core.

. Encourage housing

Provide new housing units in the central area with minimal disruption to existing low-rise residential neighbourhoods. The objective is to preserve existing housing stock and neighbourhoods while new

housing will be encouraged to develop in the central area. This plan sets a target of 30,000 new units for the central area for 1986, of which one half will be located in the central core and the other half in the remainder of the central area. Housing is encouraged in all of the central core, especially in mixed use areas.

- Transportation

Provide no expansion of the transit system in the central area. The existing transportation capacity is assumed to be fixed, while employment levels are to grow according to this transportation capacity. Based upon the plan's employment growth projections, the transportation system will be at capacity by 2001.

Implementation - Strategies and Programs

- Deconcentration of office growth

The basic strategy used to limit office development in the central area is downzoning office development capacity in the central area. A capacity range, within which office development is to be permitted, has been established. This range is derived from low and high assessments of the transportation capacity, which is between 259,000 and 307,000 employees for the central area. Office development is to be encouraged in locations where there are sufficient transportation facilities to serve that amount of office growth. The transportation capacity, which has been translated into the number of employees, is then translated into the quantity of floor space permitted. Floor space values related to the lower range of transportation capacity are included in the Zoning By-law; while the floor space related to the upper range is presented as the upper limit of commercial development permission in the Official Plan. As a result of this, office density was reduced to half the previous capacity and the maximum FAR was reduced from 12 to 8 in the central core.

Two probable effects of the downzoning strategy are: increased office rents, and reduced land value. The plan did anticipate these effects, but assumed that these changes will not be drastic, and could function as incentives for deconcentration. The assumption is that increases in office rents would likely reduce the competitive advantage of the central core as a location for office development. Thus, locating new office development at other centres would be more attractive and deconcentration would be accomplished.

. Encourage new housing

Implementation of a policy to encourage new housing in the central area, with the basic strategy of upzoning residential development capacity within specific areas.

The plan also proposed a new mechanism which no longer uses the floor area ratio as a measurement tool for regulating residential densities. This mechanism introduces a number of defined housing categories which are differentiated by density. Residential development is measured by dwelling units per acre instead of the FAR. The categories specify unit mix and unit size requirements; ancillary commercial facilities; and variations in permissible densities depending on the provision of assisted housing. (Refer to the illustration on page 27). This mechanism was first applied to mixed land use in the central area.

. Mixed land use

The Toronto plan introduces four new mixed land use categories

- Financial District: the emphasis is on commercial development with minor residential development

- High Density Mixed Commercial-Residential Area: an even mix of commercial and residential use at high density

- Medium Density Mixed Commercial-Residential: a varying mix of commercial and residential uses at low and medium densities

. Rezoning techniques

Although the Toronto plan generally allows "as of right" development subject to development review, a rezoning is required in certain developments where no other legislative means are available to achieve certain important objectives.

- In high density mixed use areas, Council may require a Development Agreement which ensures that a certain amount of residential development be provided.

- In the financial district, Council may rezone lands to permit reductions in commercial density and corresponding increases in residential density.

- In mixed use areas, two new special purpose housing categories are provided for single people and senior citizens at very high unit-per-acre densities, because the categories are unlikely to result in overly high density development because of the specified small size of individual units.

- All future institutional expansion or location of new institutions in the central area requires rezoning.

TABLE B2.6

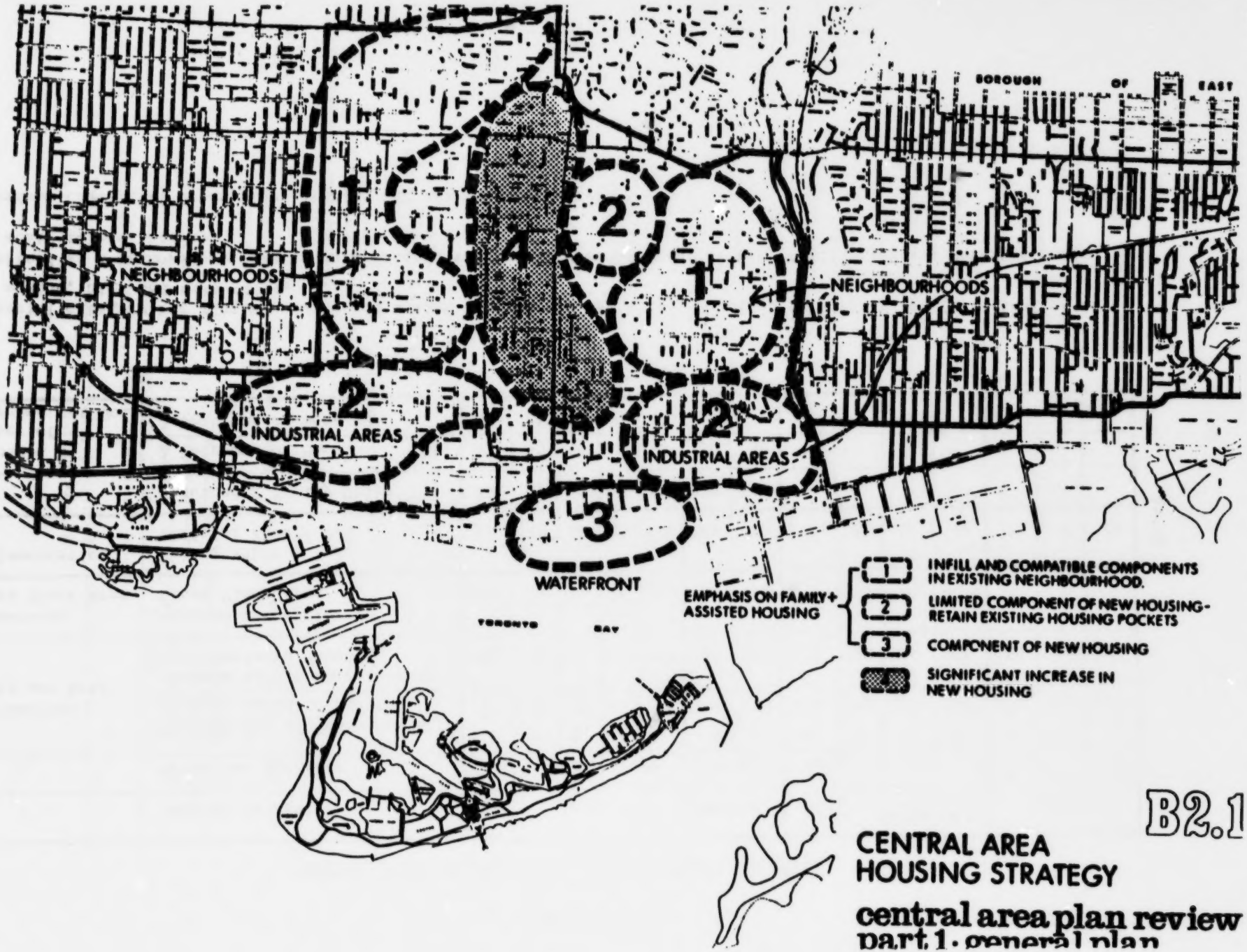
SUMMARY TABLE OF CATEGORIES SYSTEM - MIXED USE AREAS

	General Category	Low					Medium		High		Financial District		Special[1]		
	Mixed Use Category	One	Two		Three		Four		Five		Six		(1)		(2)
Residential Units per Acre	Maximum No. of Units per Acre Without Assisted Housing	A 32	A 32	B 48	A 48	B 80	A 80	B 120	A 120	B 192	A 150	B 300	A 200	B 300	A 400
	Maximum No. of Units per Acre With Assisted Housing	40	40	60	60	100	100	150	150	240	150	300	200	300	400
Commercial Gross Floor Area	Maximum Commercial Gross Floor Area	1x	2x	1x	2x	1x	2x	1x	4.5x	2.5x	8x	4.5x	*	*	*
Implementation	Zoning Right = Z.B. Official Plan = O.P.	ZB	ZB	ZB	ZB	ZB	ZB	ZB	OP	ZB	ZB	OP	OP	OP	OP
	Required % Family Units[2]	50	25	25	15	15	10	10	-	-	-	-	-	-	-
Required % Number of Bedrooms per Unit	2 Bedrooms or More	25	50	50	50	50	30	30					-	-	-
	3 Bedrooms or More	50	25	25	10	10							-		-

[1] Special category for single persons and senior citizen housing - (1) - applies to lower range (2) - applies to medium, high and core range.

[2] Defined as 2 or more bedrooms in unit located within 3 floors of grade or artificial grade and having direct stair access thereto.

* Maximum Commercial Gross Floor Area as per relevant category.

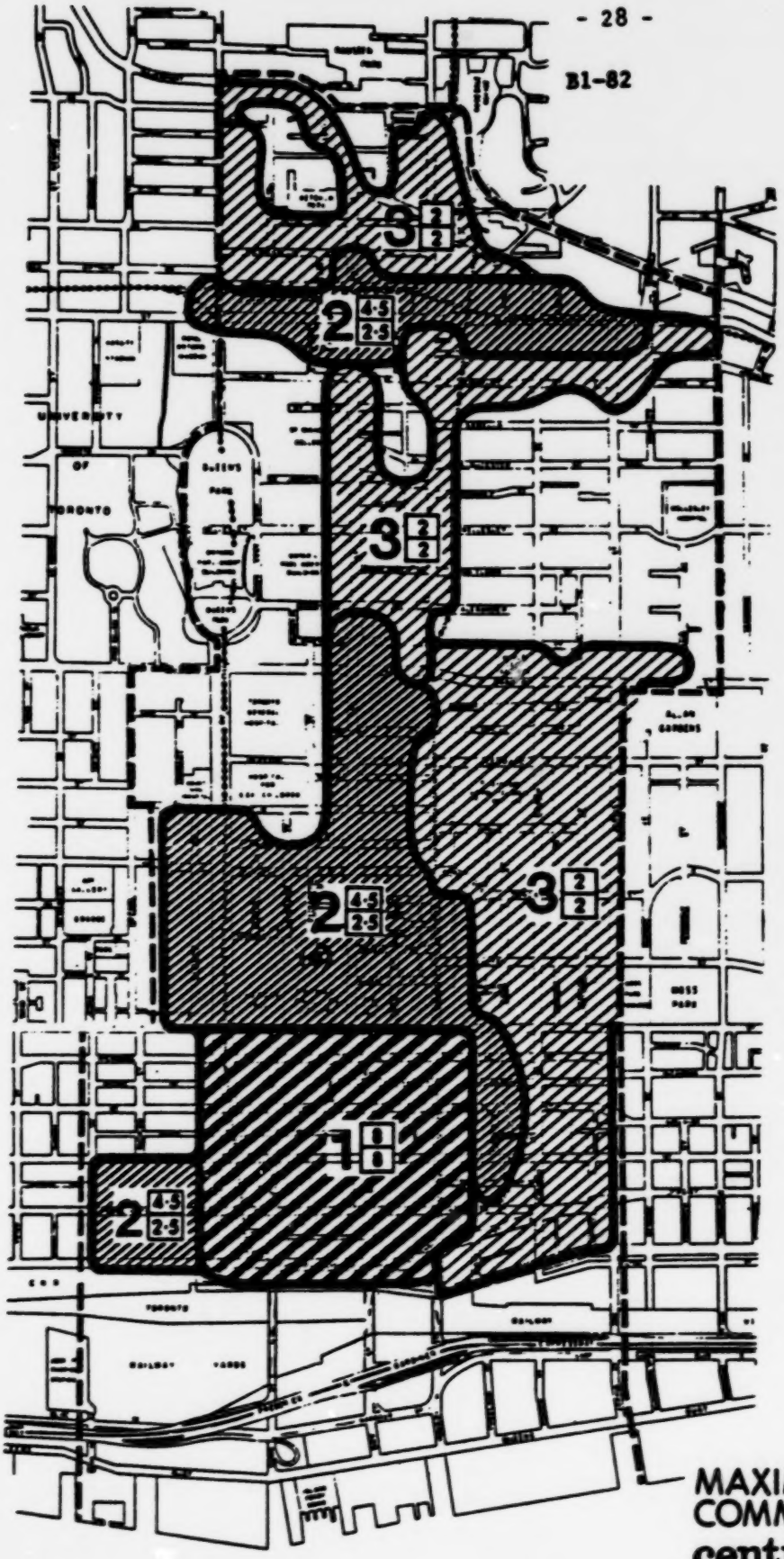

BOROUGH OF EAST
NEIGHBOURHOODS
NEIGHBOURHOODS
INDUSTRIAL AREAS
INDUSTRIAL AREAS
WATERFRONT
TORONTO BAY
EMPHASIS ON FAMILY + ASSISTED HOUSING
1 INFILL AND COMPATIBLE COMPONENTS IN EXISTING NEIGHBOURHOOD.
2 LIMITED COMPONENT OF NEW HOUSING - RETAIN EXISTING HOUSING POCKETS
3 COMPONENT OF NEW HOUSING
4 SIGNIFICANT INCREASE IN NEW HOUSING

B2.1

CENTRAL AREA HOUSING STRATEGY

central area plan review
part 1 · general plan

B1-82



HIGH DENSITY COMMERCIAL

MEDIUM " "

LOW " "

CENTRAL CORE AREA BOUNDARY

2 / 2 — MAXIMUM PERMITTED THROUGH REZONINGS UNDER THE OFFICIAL PLAN

PERMITTED AS-OF-RIGHT

OF THE MAXIMUM PERMISSIBLE DENSITY IN AREAS 1 AND 2, 0.5× COVERAGE MAY ONLY BE APPLIED TO RETAIL USES LOCATED AT GRADE

NOTE:
AREAS NUMBERED 1+2 ON THIS DIAGRAM ARE THOSE WHICH ARE REFERRED TO IN THE TEXT AS "PRIORITY AREAS"

B1.2

MAXIMUM PERMITTED COMMERCIAL DENSITIES

central area plan review part 1 · general plan

CITY OF TORONTO PLANNING BOARD OCT. 1975

. Density bonuses for historic preservation

The permissible floor area of commercial or residential developments may be increased by 25% if designated historic buildings within the development site are preserved.

TORONTO:

Outcome of the Strategies

According to the Central Area Plan, the projected office and housing growth in the central area is monitored and reviewed by Council every 5 years.

. Housing

Housing growth trends since 1976 have been evaluated and documented in a report, City Monitor '81-Housing Development, Prices and Rents in Toronto - 1980. Since the housing growth targets have been averaged out on an annual basis, it is possible to estimate the relative success of housing growth policies and strategies.

According to the report, between 1976 and 1980, there was a short-fall of 1,035 units out of a target of 22,173 units for the 5 year period. It is estimated that by 1986, the 30,000 units for the central area will be generally on target, and so will the 15,000 units for the central core. However, the target for the assisted unit sub component will not likely be achieved by 1986 unless assisted housing construction increases substantially over the next 5 years. It is only because private sector development has taken up the slack that downtown targets are being met. The construction of units suitable for families with children is generally on target for both the central area and the city.

. Deconcentration

The report documenting the evaluation and monitoring of office growth trends is not yet ready, but according a central area planner, the deconcentration policies and strategies have been quite successful. North York has become the most successful sub-centre accommodating office growth, and is followed by Scarborough.

DENVER

Documents

- Downtown Denver Development Plan; September 79; Denver Planning Office. (Approved by Council)
- Downtown Housing Policy; Denver Planning Office; (Approved by Council).
- 16th Street Design Guidelines; Denver Planning Office; (Approved by Council).

Overall Growth Policy

In guiding downtown development, the major objective in Denver is to develop the downtown into a compact, high density core area. Emphasis is placed upon pedestrianizing the downtown core, increasing public transit usage, and encouraging downtown housing. Downtown is to remain the centre of the region in employment growth, as well as for financial, governmental, and cultural activities.

Employment

The downtown working population in 1980 was approximately 92,000. Although downtown's share of the region's employment declined from 39% in 1980 to 36% in 1981, there is no existing policy to discourage employment growth in the downtown. In fact, the main employment growth policy is to encourage employment in downtown. It has been projected that by 1985, there will be an increase of 50,000 downtown employees. The 1981 office development downtown is only about one third of the total zoning capacity.

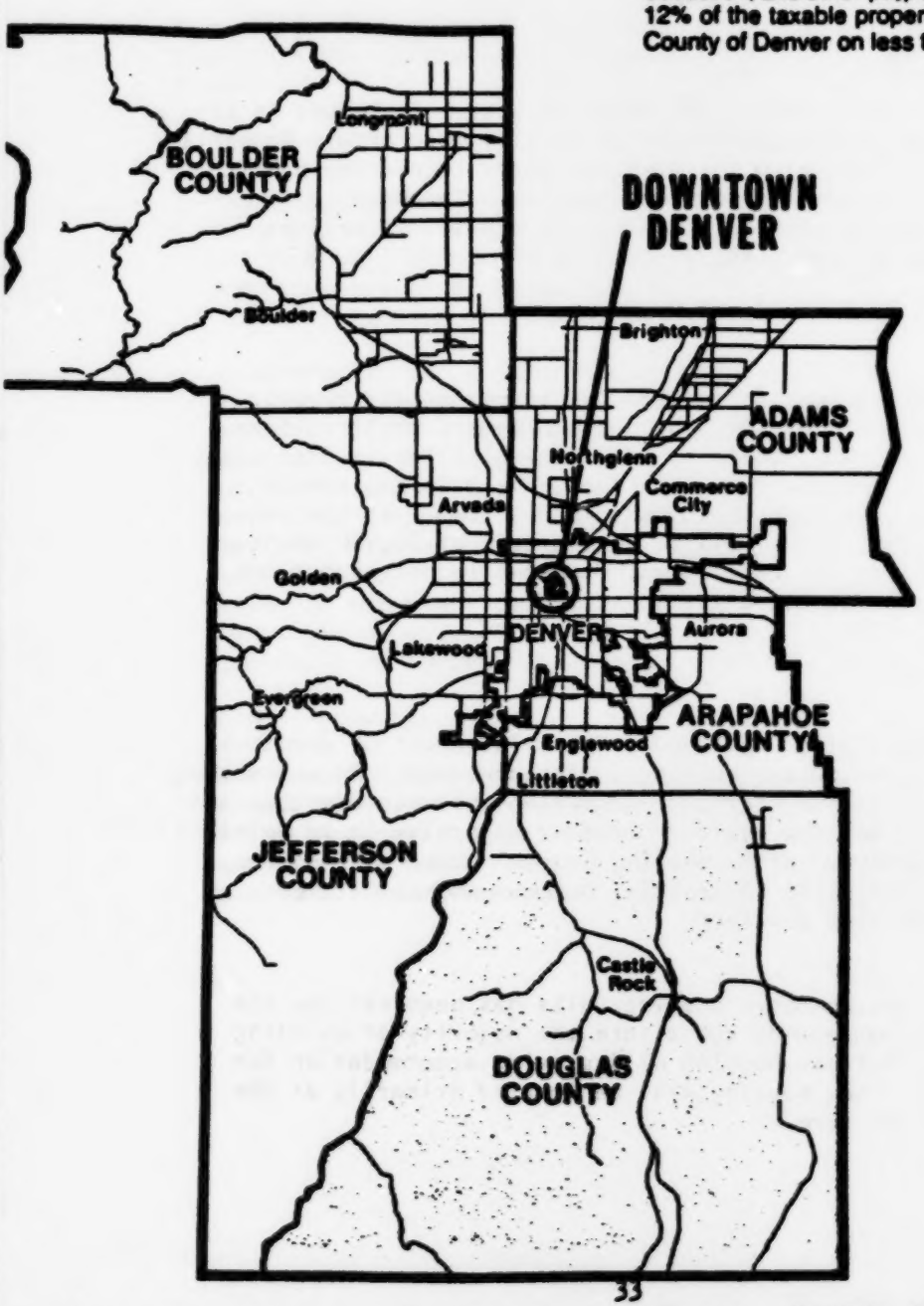
Housing

The 1980 downtown population is 2,300. The main thrust of downtown housing policy is to encourage housing in the downtown. An underlying objective of this policy is to reduce commuting between downtown and the rest of the city and the region. Another objective is to maintain liveliness in the downtown after working hours. Under this policy, the preservation of existing residential neighbourhoods in the downtown area may be also achieved.

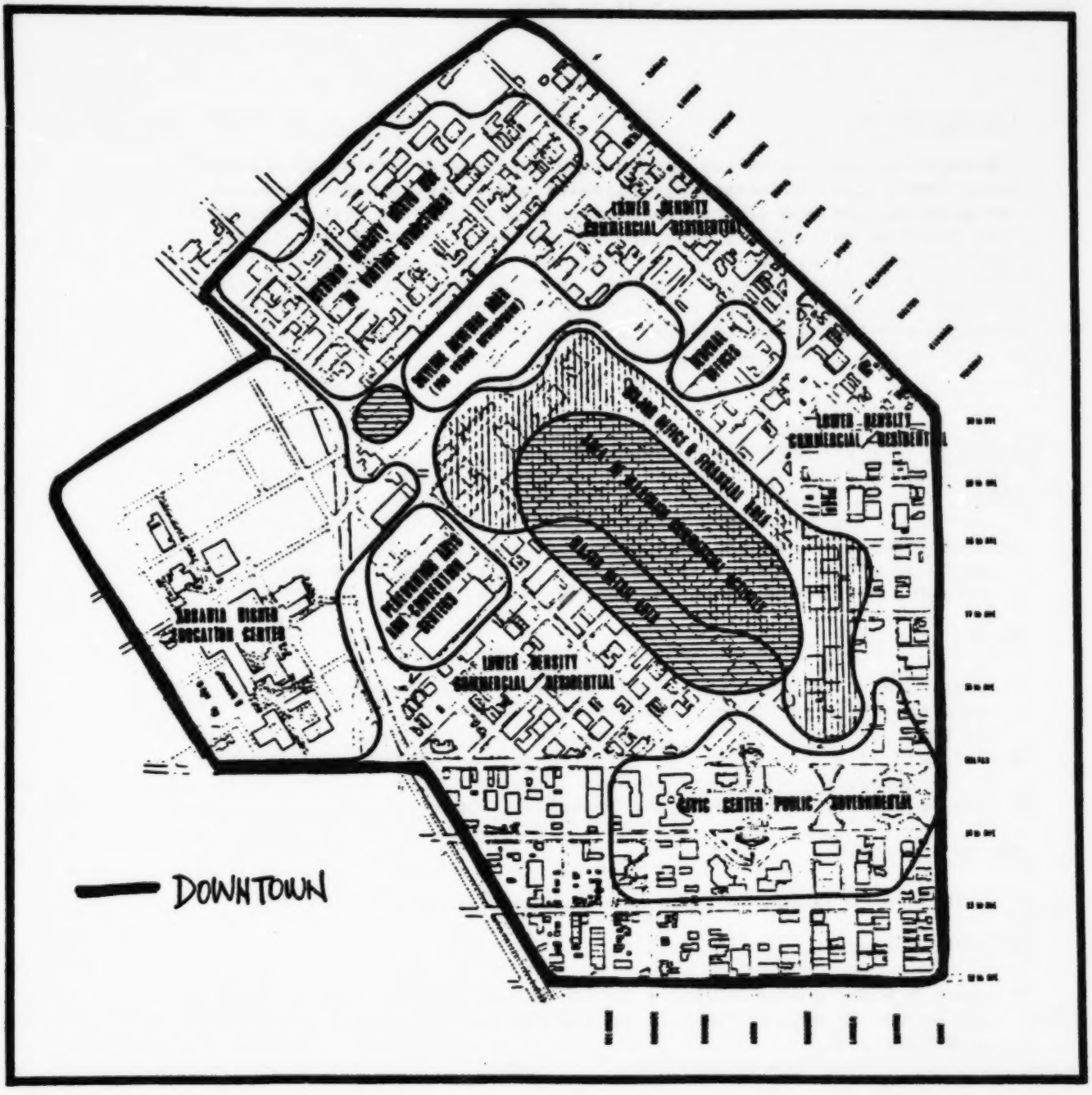
A target of 10,000 new downtown housing units has been set for the decade. Low income households constitute the majority of existing downtown residents, but new housing will provide accommodation for mixed income groups. New housing will be located primarily at the fringe of the downtown core.

DOWNTOWN AND THE REGION

Downtown, the hub of the Denver area commercial, governmental, and cultural activity since the city's beginnings in the mid-1800's, is located near the center of an urbanized region of 1,500,000 population. Downtown provides a vital resource for the City and County of Denver and an urban focus for the region. Downtown continues to attract a significant share of regional growth and investment during a time of swift urban expansion away from the center and ever-increasing mobility for area residents. Downtown is a place of employment for over 80,000 people or 11.7% of the metropolitan area work force. An additional 82,000 people come to downtown daily for business, shopping, conventions, entertainment, education, and other purposes. Downtown provides about 12% of the taxable property valuation of the City and County of Denver on less than 1% of Denver's land area.



E: DOWNTOWN DENVER DEVELOPMENT PLAN DENVER PLANNING OFFICE. SEPT. 1979



GENERAL LAND USE PATTERN

Denver's downtown has a favorable arrangement of land use, building floorspace density, and employment density. The compact central core area of offices, stores, and hotels is bordered by adjacent districts of public buildings. These districts include the Civic Center, city and state office buildings, museums, and main library; the convention-exhibition hall and the developing performing arts center; and the federal office buildings. The Auraria Higher Education Center adds to the vital function of higher education in downtown.

The Lower Downtown area includes older commercial and warehouse buildings, now being renovated for office, retail, and residential uses under the recently adopted B-7 zoning provisions. This area has the potential for developing into a unique district, providing architectural contrast to the larger new structures being added in the adjacent Skyline Urban Renewal project. Downtown has the advantage of having residential areas nearby. The adjacent Capitol Hill, North Capitol Hill, and Lincoln Park neighborhoods now fulfill a variety of central Denver housing needs and provide a 'walk-to-work' opportunity for many downtown employees.

SOURCE: DOWNTOWN DENVER DEVELOPMENT PLAN DENVER PLANNING OFFICE. SEPT. 1977

Transportation

The existing transportation system serving downtown Denver consists of buses (both local and express), roadways and pedestrian walkways. A basic assumption underlying transportation policies is that transportation could be and will be expanded to meet employment growth. Light rapid transit is at the planning stage and is pending approval in 1982. A transit and pedestrian mall is to be constructed in the downtown core. Improvement of public transit is given priority in the downtown transportation policy.

Existing land use controls in downtown

FAR:

- 10 is permitted for all uses
- up to 13 with bonuses
- existing maximum is about 14.

Height:

- there are no height restrictions except around the civic centre complex, which is to be protected as a landmark.

Amenities:

- not mandatory, to be exchanged for density bonuses.

Design Controls:

- there are no design controls, no bulk regulations or setbacks.

Historic Preservation:

- there are designated historic buildings, which only require "hold up" action for 90 days. There is no legislation supporting preservation or acquisition.

Implementation - Strategies and Programs

The strategies used for implementing the downtown housing policy are primarily incentive based. These strategies, contained in a 1981 report, on Downtown Housing Policy, have been approved by Denver Council.

1. Rezoning

   Denver Council will consider applications to rezone land in specific zones for planned unit developments that include a large number of housing units. These developments provide only housing, or mixed uses including housing with office or retail uses.

2. Land Assembly

   The City of Denver will consider assembling land in the "downtown housing opportunity areas" when developers are unwilling to provide low or middle income housing.

3. Land Write-Downs

   The City of Denver will consider writing-down the cost of land used for downtown housing. The extent of the write-down depends on the City's costs in purchasing the land, the urgency to get the land developed for housing, and the design and character of the proposed development. The necessary condition for a write-down is that at least 15% of the housing must be occupied low or middle-income residents.

Outcome of Programs

Since the strategies and policies mentioned earlier were developed and adopted recently, it is far too early to evaluate their effectiveness. According to a downtown planner in the Denver Planning Department, downtown housing is gradually increasing and there is a potentially high demand for downtown housing.

HOUSTON

Documents

- Houston Downtown Data Book; Houston City Planning Department; July 1980.
- Houston Year 2000; Houston City Planning Commission. June 1, 1980.

Critical Issues

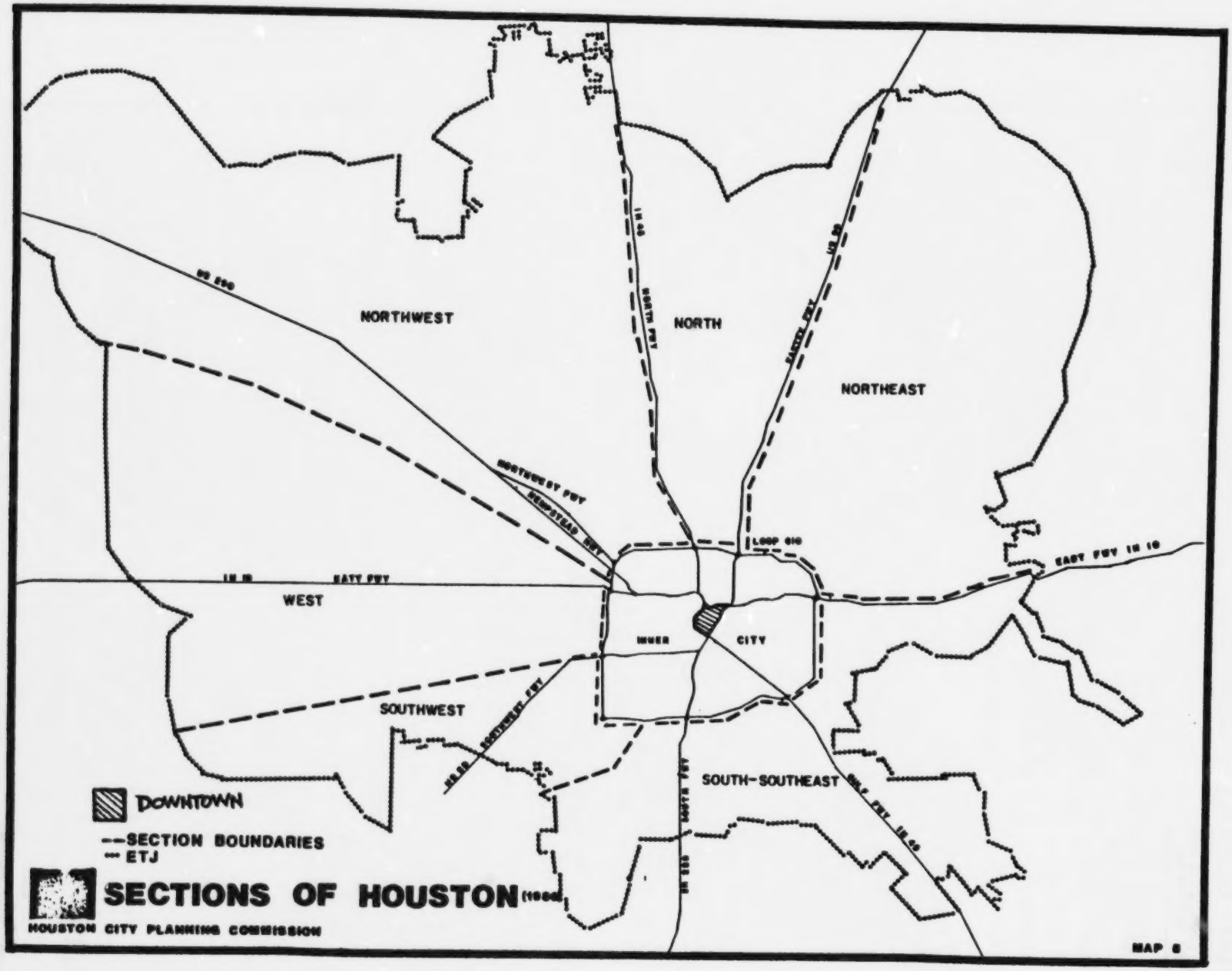
- Severe Traffic Congestion

  In Houston, movement and circulation depends heavily on freeways and thoroughfares, which are becoming severely congested. The freeway system planned in 1965 has to handle twice the number of cars for which it was planned. According to a 1970 survey of all workers in the city, transit ridership (buses) was extremely low, constituting only 2% of rush hour work trips. Private cars accounted for 85% of the trips and provide adequate transportation to handle future growth, especially office growth in downtown.

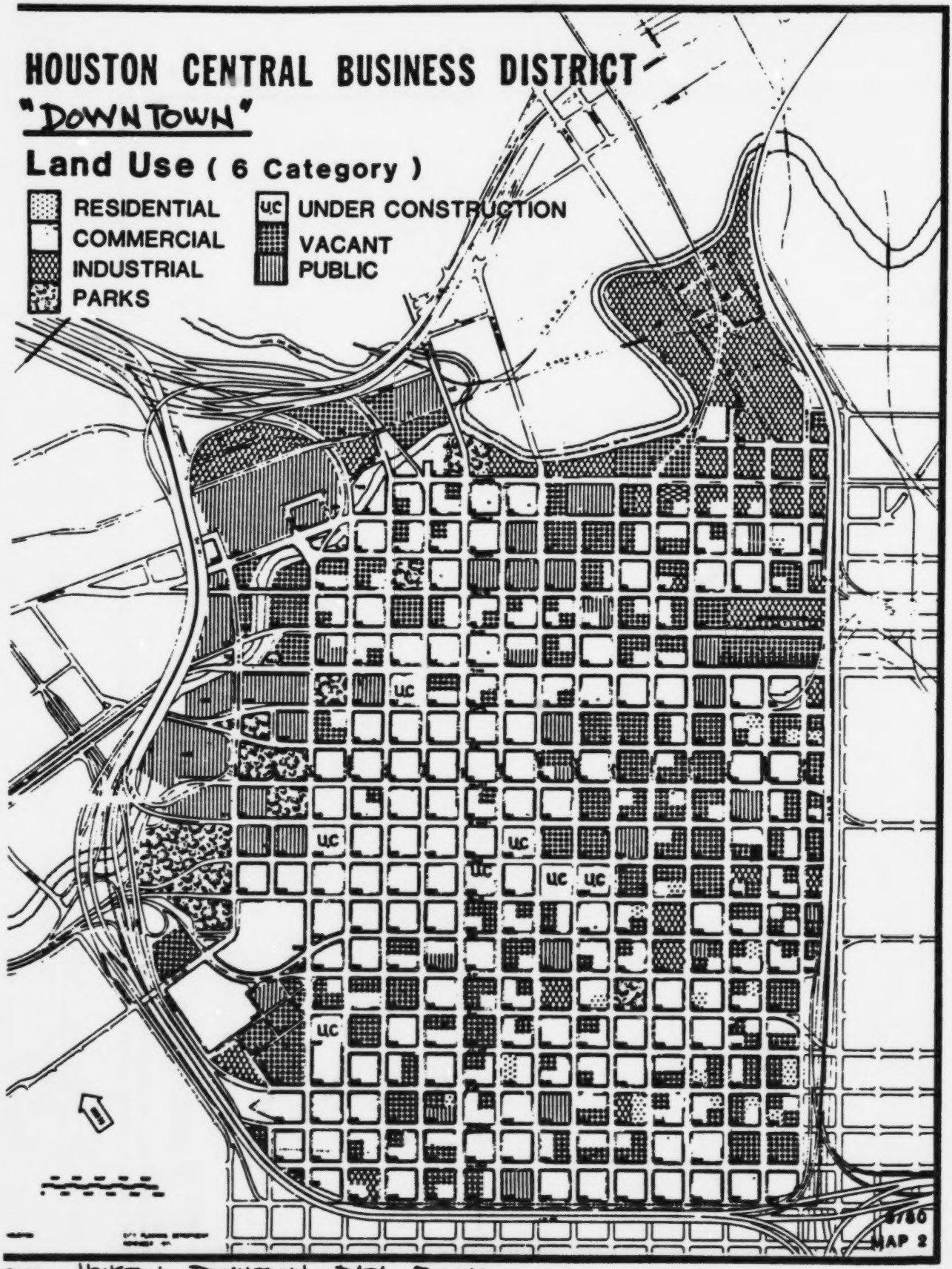
  In Houston, the spread out land use pattern and the low residential density make the operation of mass transit very difficult. Furthermore, the trend toward a high concentration of office - development in the downtown coupled with suburban residential sprawl has created mounting pressures on the transportation system. In 1980, downtown had about 35.4 million sq. ft. of office space, with applications for an addition 7 million sq. ft. being reviewed. The 1980 employment figure is estimated at 154,267. By contrast, the estimated 1980 downtown residential population is only 4,588.

- Demands on Infrastructure

  The City wastewater system has had problems meeting the demands created by growth. The higher standards of waste water treatment required by the Environmental Protection Act further complicates matters. Another concern related to public services is the need to improve sewer trunk lines. In some older neighbourhoods, redevelopment has been impeded because of the existing size of sewer lines cannot accommodate higher density land uses.



SOURCE: HOUSTON YEAR 2000
HOUSTON CITY PLANNING COMMISSION. JUNE. 1980



SOURCE: HOUSTON DOWNTOWN DATA BOOK
HOUSTON CITY PLANNING DEPT. 12
JULY 1980

. Air and Water Quality

Air and water quality have deteriorated as a result of rapid growth. Houston does not meet federal air quality standards. According to the Environmental Protection Act, air quality in Houston is below standard with respect to its oxidant (or ozone) content, and suspended particulates. Rapid urban growth and a strong industrial sector have negative impacts on the water quality of its river and channel.

Overall Growth Policy (Growth Trends)

Houston does not use zoning as a land use control mechanism. In theory, growth patterns are determined by the "market mechanism", whereby the private sector provides development according to market preferences. Therefore, if there is a demand for a certain type of development at a particular location, the private sector will provide that kind of development to make profits.

This kind of "laissez-faire" attitude has been shaping growth in Houston. The resultant land use pattern is marked by a highly concentrated downtown employment centre and suburban residential sprawl. It has been estimated that this trend will continue, maybe with a lower rate of downtown employment growth. Demand for housing remains high in the suburbs, whereas downtown housing demand is still very low. Recent trends show that suburban office development is on the upswing. As of 1981, downtown's share of regional office growth is 46%; whereas before 1981, it was 54%. Houston is expected to gradually develop a multi-nodal pattern with regional activity centres. Some office growth is expected to occur outwards, following suburban residential sprawl.

Despite the declining percentage of downtown office growth, it is still critical to pay attention to the magnitude of absolute downtown office growth, and the employment to labour force ratio, both having significant implications for work trip demand.

As an attempt to cope with future growth, Houston is planning heavy rail transit to reduce severe traffic congestion on freeways. This calls for the need to increase transit ridership, which is a challenging task since existing transit ridership is remarkably low.

Existing Land Use Controls

Although Houston does not have zoning, it has other land use control mechanisms which are mostly of a private nature as opposed to publicly operated control systems.

. Deed Restrictions (Restrictive Covenants)

Deed restrictions, which perform many of the functions of conventional zoning, have been the most widely used land use control in Houston. About 2/3 of the city is subject to approximately 10,000 of these covenants. Restrictive covenants serve the purpose of protecting neighbourhoods from intrusion of non-compatible uses. The developer must obtain approval from each property owner before a change in land use is allowed. These covenants generally control use, density, size, height, setbacks, cost and style. The approval or rejection of development is primarily dependent on the negotiation between the developer and the adjacent property owners. Since 1965, the city has been assisting individual property owners in ensuring the validity of their deed restrictions, and preventing violations of agreements.

. Sewer Moratorium

An inadequate wastewater system in certain areas has hindered growth to a certain extent. The city has enforced a Sewer Moratorium on construction in areas where sewer treatment capacity is insufficient. Currently there is a program to expand sewer treatment in these areas. The moratorium will be lifted once the expansion of the system is complete.

. Some design controls:

- There are minimum setback regulations.

- There are no height restrictions except for Federal Aviation Administration flight path controls over the CBD, 998.5 ft.

- There are some subdivision regulations which control setbacks of buildings and minimum lot size.

MINNEAPOLIS

Documents

- Minneapolis Metropolitan Centre Planning Principles.; Minneapolis Planning Department; 1978. (Approved by Council).
- Minneapolis Metropolitan Centre Planning Principles; 1990; Minneapolis Planning Department; 1978.
- State of the city - 1976 VI; Minneapolis Planning Department; July 1976.

Overall Growth Policy

The following principles have been adopted by Minneapolis Council to guide downtown development. Downtown should be developed into a compact and crowded activity centre. It should be the centre of the metropolitan region and the upper mid-west in economic, administrative, and social development. Offices, retail, services and housing will be encouraged in downtown.

Employment

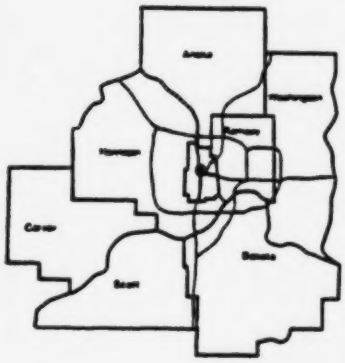
Employment growth, especially in the office sector, is to be encouraged in the downtown. By 1990, downtown is estimated to have 20 million sq. ft. of office development, which is an increase of 3.5 million sq. ft. over the 1977 level.

Housing

A main concern in housing policy is that the population has been declining in both the downtown and the city throughout the mid 1970's, even though the quantity of housing units has not decreased. This implies a trend of smaller households and smaller housing units in the city.

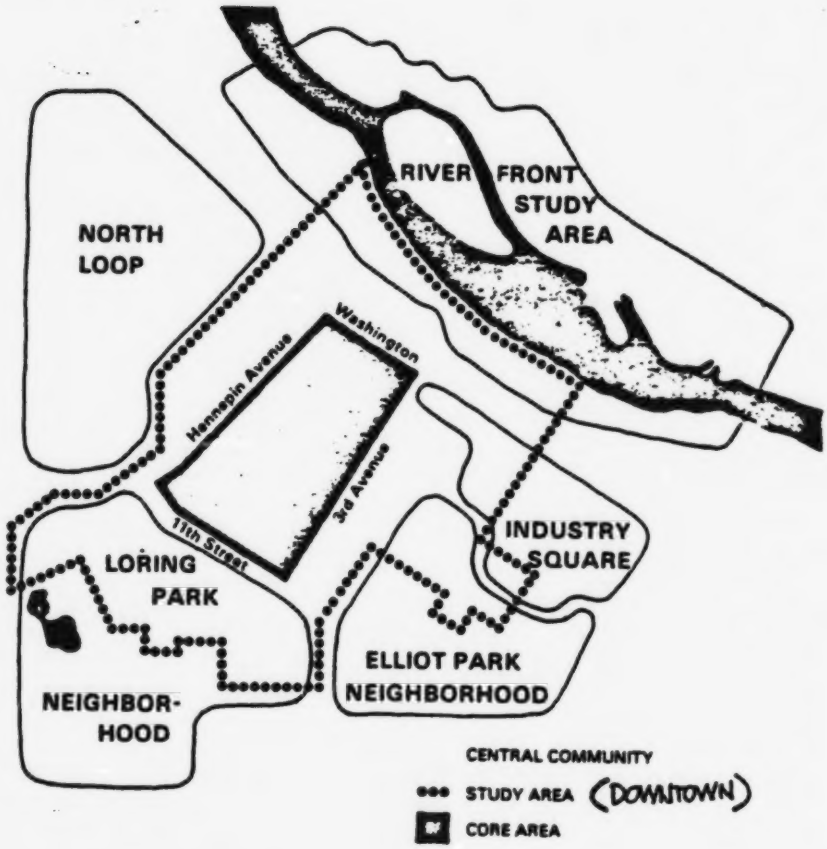
9,800 housing units are to be developed in the downtown by 1990. New housing will not be encouraged to develop in the downtown core but at the fringe of it. Other than attempting to increase population and housing in the downtown, this housing policy also attempts to foster a lively, after work community in downtown. Encouraging downtown housing may also reduce the distance between home and work. In 1960, about 87% of employed Minneapolis residents worked in the city. By 1970, that percentage declined to 73%. This housing policy attempts to reverse this trend.

MINNEAPOLIS



he terms "Metro Center," "Downtown," and
Metro Center Study Area" are used interchangeably.
he focus of the report, however, is on the Metro
enter Study Area, which is smaller than the Total
letro Center Area.
hese maps illustrate areas to which reference is
ade.

-4



SOURCE: MINNEAPOLIS METRO CENTRE.
MINNEAPOLIS PLANNING DEPT. AUG. 1978

Transportation

Existing transportation facilities in the downtown include buses, roadways and a very extensive system of pedestrian skyways. Present transportation policies put emphasis on public transit improvement and extension of the skyway system linking businesses and major retail outlets. In 1977, transit ridership for rush hour traffic to downtown was 37%; in 1980, it increased to about 42%. Metro Transit Commission's target for 1990 is 50% transit ridership.

On the whole present transportation facilities are keeping pace with employment and economic development in the downtown. Since employment growth is to be fostered in the downtown, transportation policy primarily aims at expanding facilities to serve additional growth. It is perceived that pedestrianization, skyways, and public transit are the keys to building a compact and multi-level downtown.

Implementation - Strategies and Programs

The following strategies and plans, documented in the Minneapolis Metro Centre Planning Principles and Plan ... 1990, have been approved by Minneapolis Council.

1. Encourage Housing

   - Housing Development Revenue Bonds

     The City will request proposals for the issuance of Housing Development Revenue Bonds to be used for the financing of housing developments.

   - Land Write-Downs

     The City will consider writing down the cost of land for housing development in the downtown.

2. Transit Improvements by 1990

   - Expansion of the minibus service.
   - Exclusive bus lanes.
   - Remote control bus waiting areas using electronic sign boards to show approaching buses.
   - Priorities for buses as part of a computerized traffic control system.

MINNEAPOLIS:

Outcome of Strategies and Programs

The City just cleared 21 acres of land at the fringe of the downtown core for redevelopment, of which a large part will be housing. This piece of land was bought by the City and sold at low cost. 1/3 of the housing will be assisted and 2/3 market value. This development will add a substantial amount of housing in the downtown area.

Most of the skyway system has been built privately at the developers' option. Although there is a density bonus for providing skyways, developers seldom take advantage of it. On the whole, developers are quite supportive of the skyway system, which is perceived to contribute to a better environment and good business. It appears that skyways will continue to be a major component of downtown Minneapolis' circulation system.

PORTLAND

Documents

- Planning Guidelines. Portland Downtown Plan; 1972 Portland City Planning Commission; (Approved by Council).
- Completing the 2nd Decade; 1978. Portland Development Commission.
- Downtown Housing Policy and Program; 1979. Downtown Housing Advisory Committee; (Approved by Council).
- Portland Downtown Plan - Goals and Guidelines; October 1980; (Approved by Council).

Critical Issues

- Housing Shortage

  For the past two decades, the downtown has experienced a great deal of urban renewal. The successful revitalization of downtown has made the downtown a more attractive and desirable place to live. There is increasing demand for housing in the downtown and its surrounding area. The failure of housing supply to keep up with housing demand has created severe shortages of housing. Since 1970, housing units, especially low income units and apartments, have decreased in the downtown.

- Transportation

  Transit ridership to the downtown needs to be increased. Automobile traffic causes air and noise pollution, and pedestrian-vehicle conflicts, all of which reduce a pleasant and enjoyable environment. A primary concern is to reduce, and where possible, eliminate automobile traffic in the downtown core. A pedestrian and transit oriented downtown core is more desirable.

- Declining retail

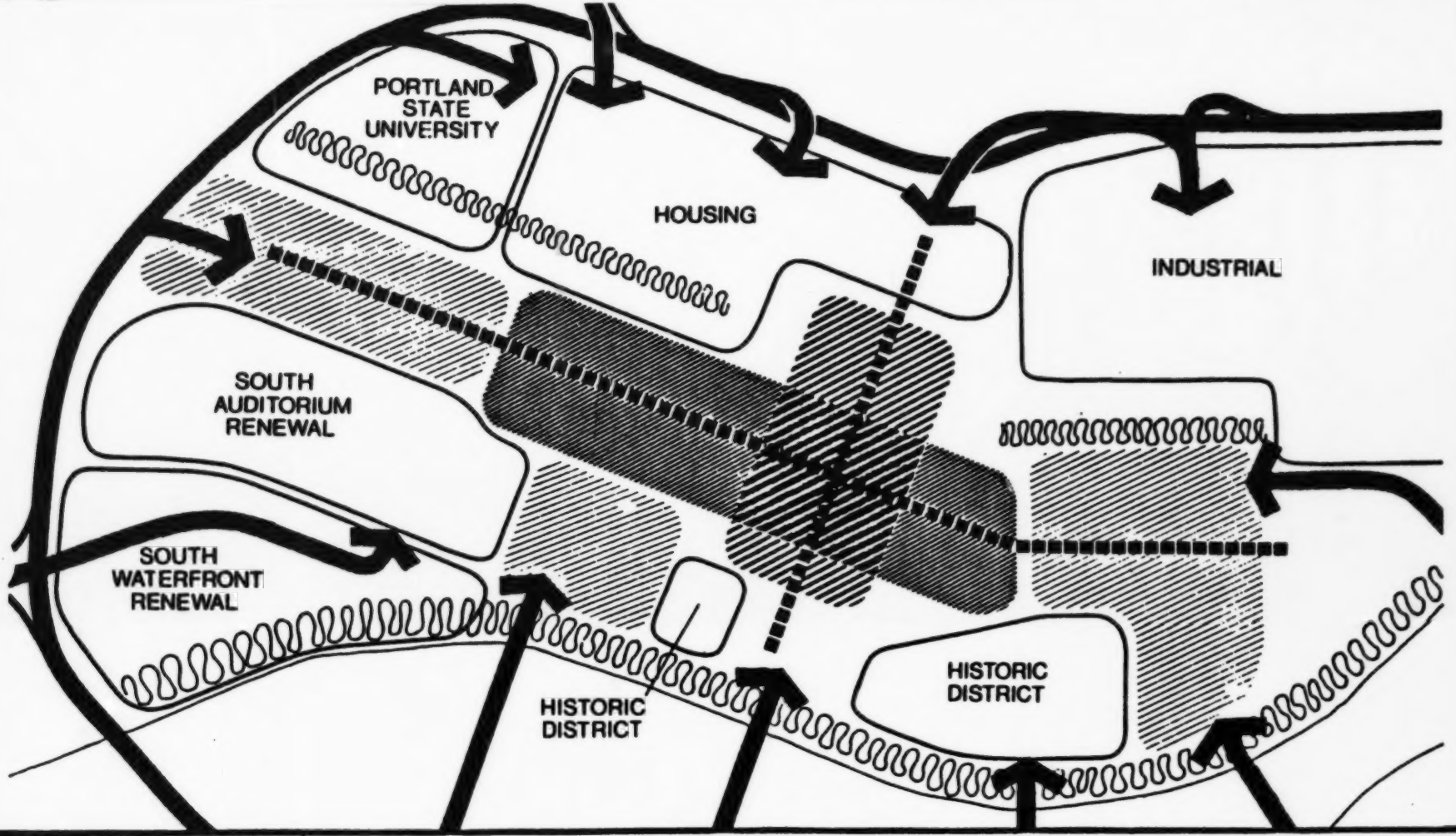
  Between 1958 and 1980, downtown's share of regional retail activities declined from 17% to 4%.

Existing Policies

Most of the policies, goals and objectives of the 1972 Portland Downtown Plan are still effective and relevant. The 1980 Downtown Plan updated some of the 1972 policies.

- Encourage housing in the downtown - maintain low income housing and develop moderate income housing.

  It is adopted policy that the housing that existed in 1972 should be maintained while new housing should also be developed.



DOWNTOWN PLAN CONCEPT

north

PORTLAND BUREAU of PLANNING

1" = 1000'

RETAIL CORE

MAJOR OFFICE CORRIDOR

MEDIUM DENSITY OFFICES

MAJOR VEHICLE ACCESS

MASS TRANSIT

MAJOR OPEN SPACE

SOURCE: PORTLAND DOWNTOWN PLAN GOALS & GUIDELINES
PORTLAND BUREAU OF PLANNING AT 1990

PORTLAND

. Four additional housing policies on top of the 1972 Plan.

1) Maintain existing low-income housing by assisting, upgrading and maintaining it.

2) Create middle-income housing. A target of 2,500 new units, primarily for middle-income groups, is to be accomplished by 1985. Presently, low-income households constitute 73% of the downtown population; middle-income 19%; and high income 8%. Although low-income households are to be maintained, their share of total housing will decline because a large portion of the new housing belongs to the middle-income category. It was found out that there is overwhelming housing need for individuals and small families that earn moderate incomes; while demand for high income accommodation is limited.

3) Encourage high-income housing only when it is not developed at the expense of existing low-income households.

4) Support housing related activities to encourage neighbourhood livability, such as provision of services, improvements, and designs.

. Promote a transit and pedestrian oriented downtown.

The mass transit system has to be improved and expanded in order to achieve a transit ridership target of 75% of the passenger trips to and through the downtown core. Reliance upon the automobile is to be discouraged and reduced.

Office development should be located along or near transit routes so as to make the internal circulation in the downtown more efficient, and transit riding more convenient.

Develop major pedestrianways in various locations, especially along retail, transit, and high density office developments.

. Maintain downtown as the centre for the region's office development.

Concentrated office development is to adopt a linear pattern, following major transit routes in the downtown. Parking is to be located at the periphery of the downtown core and at each end of transit corridors.

. Revitalize retail activities in the downtown core.

Provide pedestrianways to connect the retail core with the waterfront, offices, residential areas, and parking facilities so that retail centers are more accessible. Short term parking will be permitted to locate in the downtown core to make shopping convenient. Renovate run-down facilities to strengthen retail activities and to foster pleasant shopping downtown.

PORTLAND:

Implementation - Strategies and Programs

. Encourage housing.

1) Mixed zoning (AX zone) has been established, which is an apartment zone where some commercial development is allowed. At least 60% of any development within this zone should be housing. (Adopted in 1977).

2) In other mixed-use areas other than the AX zone, a density bonus of 2 FAR will be granted to developments that provide housing. (Adopted for a few years).

3) 9 housing programs which primarily offer financial and management assistance:

e.g. - Lessee loans for multi-family units, whereby loan funds are available for essential upgrading to prevent closure of leased residential hotels.

- Maintenance assistance for low-income groups for both owners and lessees.

- Management assistance.

- Multi-Family Housing Bonds, whereby below market interest financing is provided to encourage new or rehabilitated multi-family dwellings for low and moderate income groups.

. Locate office developments along transit corridors.

This policy will be implemented through co-ordinating FAR limits of commercial zones with proximity to mass transit services.

. Encourage retail uses.

It has been proposed in a 1981 retail plan that in order to increase retail activities in the downtown, density bonuses should be granted to projects that include retail space (not yet approved).

. Improve transit by:

- developing an interchange system, basically a transit terminal, for transfers between modes of inter-city and intra-city transportation.

- planning for light rapid transit, to be ready for operation in 1985.

- providing an additional downtown shuttle service.

SAN FRANCISCO

Documents

- Guiding Downtown Development; May 1981; San Francisco City Planning Department.
- Regional Plan - San Francisco Bay Area; 1978 Association of BAG.

Critical Issues

Downtown San Francisco has been experiencing accelerating economic growth and its corresponding urban change. Since 1964, there has been an addition of 24.8 million square feet of office space and 10.8 million square feet are either under construction or approved for construction. The 1981 report "Guiding Downtown Development" identifies major concerns about the changing downtown environment, and suggests a variety of strategies which could be used to resolve those concerns.

- Housing shortages, escalating housing costs and rents.

  The overwhelming amount of office employment growth in the downtown places heavy demands on additional housing. When housing supply is not keeping pace with housing demand, housing costs and rents tend to escalate. San Francisco's housing costs are 76% above the national average, the second highest in the U.S. Annually, 2,000 households enter the city but only 1,000 new units are built.

- Transportation

  Peak hour congestion occurs on many major highways. Accelerating growth in the downtown creates demand for more transportation facilities. Under conditions of limited road capacities, and considerations for energy efficiency and air pollution, public transit improvements are seen to be the most desirable transportation alternative.

- Urban design considerations

  Thriving downtown growth, especially in the office sector, may have negative impacts on San Francisco's attractive skyline, relatively compact and small urban scale, and its natural environment. All of these features make San Francisco a unique urban centre, and it is felt they should be maintained.

- Amenities - recreation, open space, and retail

  New development should not be built at the expense of recreation, open space and retail facilities. Existing open space and recreational space may become congested as a result of new developments.

. Preservation of significant buildings

New development may result in the actual and contextual destruction of historic and architecturally significant buildings.

. Industrial relocation

Office and housing developments in the downtown have resulted in the relocation of a substantial amount of industry. A major concern is to prevent substantial displacement of industry outside of the downtown.

. Individual project assessment vs overall/cumulative impact

Merely assessing new development on an individual project basis has been found to be inadequate. The overall/cumulative impacts of individual projects may have significant implications which are difficult to identify and evaluate on an individual project basis.

Overall Growth Policy

The 1981 report suggests many strategies which, depending on specific types of development, require the private sector to conform to building standards, to provide certain services or to contribute cash to public funds. The underlying objective of these strategies is not to discourage growth or limit growth per se. Rather, the main objective is to mitigate the negative impacts of proposed development by asking the private sector to pay for part of the public costs caused by the development. According to a downtown planner in the San Francisco Planning Department, these strategies are not likely to reduce the projected employment growth in the downtown. An underlying assumption is that with the great demand for office development in the downtown, these strategies will not reduce the projected office growth rate.

Existing Policies

Most of the strategies proposed in the 1981 report "Guiding Downtown Development" implement and conform to the existing policies of the San Francisco Master Plan (1972). In certain instances, new policies and strategies have been proposed. The following list presents some of the existing Master Plan policies which are applicable to the downtown.

. Commerce and Industry

Objective - "Maintain and improve San Francisco's position as a prime location for financial, administrative, corporate, and professional activity."

In recent years, the downtown financial district has been absorbing almost 2/3 of the city's new permanent jobs. This rate of growth is expected to continue, or it may be at a lower rate.

Policy 1 - "Encourage continued growth of prime downtown office activities so long as undesirable consequences of such growth can be avoided."

The undesirable consequences of growth identified are largely social and environmental costs that the public has to pay for: additional commuter traffic and its impact on parking, congestion, air pollution, noise pollution, pedestrians and energy consumption; the impact of large office buildings on the scale and character of the city; and the pressure of additional employment on the already limited housing supply and existing services.

Policy 2 - "Guide location of office development to maintain a compact downtown core so as to minimize displacement of other viable uses."

It is recognized that concentrated uses in the downtown foster both the viability of the office sector and public transit usage.

Policy 3 - "Assure that downtown development is compatible with the design and character of San Francisco."

Highrise office construction tends to threaten the scale and character of the city. This policy calls for continued assessment of guidelines and criteria for regulating the height, bulk and design of downtown buildings.

Policy 4 - "Provide adequate amenities for those who live, work and use downtown."

This policy calls for the use and improvement of the bonus system to ensure adequate amenities.

Policy 5 - "Control traffic and congestion in the downtown area, particularly from private automobiles."

. Residence

Policy 2 - "Encourage the conversion of underused non-residential land to residential use, and encourage multiple residential development in conjunction with commercial uses in the downtown commercial area."

. Transportation

Objective 1 - "Maintain the type and level of transportation facilities and services appropriate to enhance the economic vitality of the downtown business and shopping district."

Given that downtown San Francisco will continue to be the regional centre, compactness, internal accessibility and regional accessibility to downtown are necessary conditions for the proper functioning of downtown. Priority is given to public transit, which is the most efficient and least space-consuming mode of

transportation. By contrast, automobile use is to be discouraged.

Policies - ensure adequate pedestrian movement space

- encourage short term parking within and adjacent to the downtown core; discourage additional long term parking in and around downtown

- develop a shuttle transit system to supplement trunk lines within downtown.

Objective 2 - "Provide convenient and high capacity loading points for transit travellers."

Policies - provide for commuter bus loading

- co-ordinate local and regional transit systems in common or nearby terminals to allow convenient transfers.

Implementation - Strategies and Programs

Some of the following strategies, proposed in Guiding Downtown Development (1981), have been approved by San Francisco City Council. (Approved strategies are marked with an *).

. Increase the housing supply in the downtown, which may consequently reduce the escalating rate of housing costs and rents.

*1) Mandatory housing provision in certain office developments

This strategy requires developers of office buildings to provide housing, which could be either new housing or rehabilitation of long vacant existing housing. All office developments exceeding 50,000 square feet have to provide 640 square feet of housing for every 1,000 square feet of office space. This requirement is based on the assumptions that the floor space per worker ratio is 250; that 40% of the employees will live in San Francisco, and that the average residential space requirement per person is 400 square feet.

To prevent developers from providing larger but fewer units, a unit based requirement is also imposed. That is 0.9 housing units have to be provided for every 1,000 square feet of office space. An underlying assumption is an occupancy rate of 1.8 persons per dwelling unit.

Current policy also requires 10% of the units in large condominium projects to be low and moderate income housing, if subsidies are available. However, no subsidy programs are available at present, and this policy is to be reviewed.

2) Density or height bonuses granted in exchange for housing in mixed use developments.

A bonus in the FAR, up to a maximum of 5, will be allowed if housing is incorporated into commercial developments. (Refer to the illustration on p. 58).

A height bonus, up to a maximum of 50 ft., will be allowed in certain of the highest height districts if the commercial development includes housing.

3) Ensure enough land for housing by:

- Making available City owned land which is no longer needed by the City or which is suitable for housing.

- Rezoning certain areas adjacent to downtown.

4) Protect against the demolition of residential uses due to commercial development pressure.

The Residential Hotel Demolition and Conversion Ordinance protects residential hotel units. However, the demolition or conversion of apartment units are not protected. A demolition or conversion control ordinance, or R/C zoning may be needed to protect apartment units.

5) Expedite housing project approvals by creating a one stop permit centre, and raising permit fees for hiring additional staff.

6) Make changes in open space requirements and FAR calculations.

- Allow solariums to qualify as usable open space in high density housing developments.

- Modify the Planning Code so that, in mixed use buildings, FAR calculations do not include the elevator areas linking the non-residential and residential floors.

. Transportation

- Implement a "transit first" downtown access policy. Approval of all new downtown developments are subject to the following conditions:

*1) Recognizing that new office development in the downtown demands additional transportation services, the City asks developers to give $5 per gross square foot of new office space built to a transportation fund: This fund will be used for maintaining and improving transportation services.

2) An office project sponsor shall encourage transit usage and ride-sharing among tenants and employees by implementing programs, like carpools/vanpools, preferential parking for vanpool/carpool vehicles, employer subsidized transit passes, and transit encouragement programs.

3) The proposed building shall provide bicycle and/or moped parking.

4) The office project sponsor shall participate in undertaking feasibility studies of commuter parking facilities and shuttle systems serving the project site and parking facility.

There are other transportation measures which aim to improve circulation in and around the downtown. Some of these are:

1) Locate new long-term commuter parking on the fringe of the downtown, and short-term parking adjacent to, but not in, the downtown core.

2) Seek conversion of existing long-term parking in the core to short-term parking.

3) Provide exclusive or semi-exclusive transit lanes in transit preferential streets.

4) Implement the pedestrian circulation policies proposed in the Master Plan.

- Ensure adequate amenities - recreation, open space and retail facilities.

1) Mandatory provision of recreation and open space in proportion to building size.

For commercial development, the following ratios are used to calculate the amount of mandatory recreation and open space. Generally, 1 square foot of recreation and open space is required for every 25/30/40/50 gross square feet of building floor space, depending on the density.

C-3-O	C-3-R	C-3-G	C-3-S
1:25	1:40	1:30	1:50

2) Require and allow additional floor area for small scale convenience retail space in new office development.

The additional FAR to be allowed for ground floor space devoted to small scale uses, providing retail, shopping, services and eating opportunities is to be not more than 2,000 sq. ft. per establishment.

Apply Master Plan policies regarding the amount and quality retail space to be provided.

- Urban Design Criteria

1) Reduce overall building size by lowering the FAR.

In the high density commercial district, the maximum base FAR will be 12, which may go up to 17 with the provision of housing or retail space, or when applying a transfer of development rights or transfer of unused development rights from another site which contains a building worth restoring. (Refer to the illustration on p. 58).

2) Adjust heights to protect and enhance selected locations.

The existing height control is to be adjusted to restore the redeemable features of the San Francisco's natural setting and built form. Examples are: preventing the blockage of the view of Nob Hill, insuring adequate sunlight to a new park and plazas on Market Street.

3) Revision of bulk controls to improve building appearance for structures higher than 65 ft., in specific height districts.

- Reduce floor area per floor to a maximum of 20,000 sq. ft. Greater floor area will be allowed on lower floors if an equal amount is removed from the upper floors. (Refer to p. 59, A).

- Reduce the size of upper floors by requiring a minimum of 1/15 of upper floor area to be shifted to the lower floors. (Refer to p. 59, B).

- Control overall width by restricting the average maximum plan dimension at 200 ft. Similar to the two new bulk controls mentioned earlier, the width of upper floors could be shifted to lower floors. (Refer to p. 59, C).

4) Architectural embellishments are to be encouraged.

- Architectural projections, which do not increase floor area, above 7.5 feet from the ground will be allowed.

- The FAR is to be measured from the glass line at windows to exclude decorative non-structural features that do not increase usable floor area. The common practice of measuring FAR from exterior walls tends to encourage the production of smooth skinned buildings, and discourage buildings with interesting features. Developers have a common desire to maximize net rentable floor space.

5) Mandatory conditions for incorporating art works in or near new buildings. 1% of total construction of a proposed project should be devoted to the provision of art works for the site.

6) Mandatory provision of street trees.

7) Preservation of significant buildings.

- Reduce the economic incentive to demolish significant buildings by applying a Transfer of Development Rights (TDR). The unused floor area of significant buildings could be transferred to another site within the same zoning district, or to another site in a special development district.

- Grant additional development allowances to owners to encourage the preservation of significant buildings. If necessary, the San Francisco City Planning Commission can grant additional floor area allowances of up to 50% of the restored building to the owner. The owner could include this additional allowance in the TDR transaction.

- Redirect growth from areas with significant buildings to those areas with fewer significant buildings. At present, certain areas in the high density zones (C-3-O) contain many architecturally significant buildings which are constantly under redevelopment pressures. Whereas, certain areas within low density zones (C-3-G, C-3-S), which do not face a great deal of development pressure, have very few architecturally significant buildings. Therefore, in the low density zones, two specific areas designated as Special Development Districts will be up-zoned. Their base FAR, of 6 and 8 could go up to 12 FAR by transferring development rights from an eligible site in the high density zone. In such a way, additional densities in the low density zone would only be allowed when commensurate reduction in densities occur in the high density zone.

. Prevent any substantial relocation of industry

- Approval of applications for conditional office and residential uses in industrial districts is subject to the following conditions; the site has no potential market for industrial uses, and new development will not disrupt adjacent industrial uses.

. Cumulative Impact Assessment

Cumulative impact data is to be updated constantly. Apart from preparing individual environmental assessments, each project sponsor is to also contribute funds to be used to update the cumulative impact information.

A. BUILDING SIZE, DESIGN AND APPEARANCE

Concern: That downtown development not result in dark, crowded, and windy streets, poor interrelationship between buildings, and an awkward and unattractive skyline.

Approaches:

(1) Reduce Overall Building Size by Lowering Floor Area Ratios

It is proposed that the base Floor Area Ratios (FAR) be revised to reduce the permitted intensity of development in various C-3 zones, permitting that base FAR to be exceeded only by:

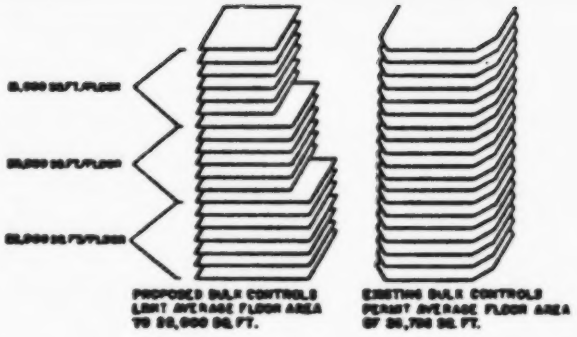
1. incorporating housing in the project (see Housing section, p. 16);
2. transferring unused development rights from another site containing a landmark or other significant building and/or obtaining credit for restoration of such a building (see Preservation section, p. 21) and/or;
3. including convenience retail space in the project (see Retail Services section, p. 11).

* The base FARs and allowable increases would be:

C-3 Districts

	C-3-0	C-3-R	C-3-G	C-3-S
Maximum Base Floor Area Ratio (FAR)	12	6	8	6
Housing Allowance -- Maximum additional FAR	5	4	4	2
Development Rights Transfer & Retention & Restoration Allowances -- Maximum additional FAR	3	2	2	0
Retail Allowance -- Maximum additional FAR	.5	0	.5	.5
Maximum FAR with Allowances	17	10	12	8

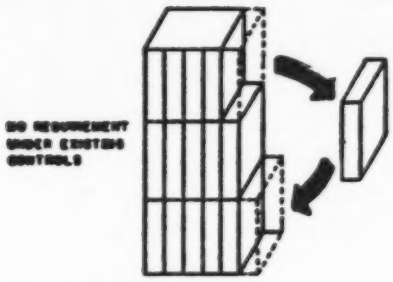
(A)



b. Reduce the Size of Upper Floors

Require a minimum of 1/15 of the total floor area above the midpoint of the portion of the building over 65' to be shifted from the upper floor areas and transferred to the lower floors of the same structure. The amount required to be shifted may be reduced 5% for each 1,000 sq. ft. reduction of the average floor area until the average floor area is 10,000 sq. ft. or less at which point downward bulk transfer would not be required.

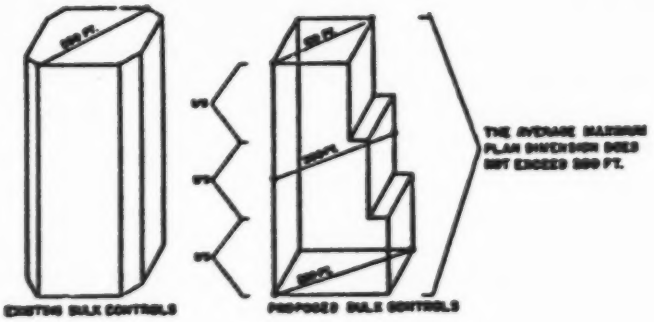
(B)



c. Control the Overall Width

The average maximum plan dimension (the furthest two points apart on any floor plan) should not exceed 200 feet. An increase in the maximum plan dimension beyond 200 feet in the lower part of a tower would be permitted if equivalent reductions are made in the upper parts of the building.

(C)



Outcome of the Proposals

The transportation fund and the housing requirements have been approved by San Francisco Council, and have been implemented for several months. So far, 3,000 housing units have been achieved as a result of the housing quotas. This proposal has not yet been jeopardised by any critical opposition from developers. However, the transportation fund strategy has been challenged by the private sector and is now undergoing action in court. The developers are not opposed to the idea of having to contribute to a fund, but they are against some technical details of how the fund should be calculated.

The San Francisco Planning Department is presently preparing a status report which documents the achievements to date of the two proposals approved as implementation measures.

SEATTLE

Documents

- Guidelines for Downtown Alternative Plans; (Adopted by Council, August 1981).
- Background Report of the Downtown Land Use and Transportation Project; March 1981.
- Catalogue of Land Use Plans and Policies in Downtown Seattle; January 1981.

Critical Issues

- Transportation - Major arterial and freeway approaches to the downtown operate at or near capacity during morning and evening peak hours. It is stated policy that freeways and roadway systems will not be significantly expanded. Therefore, the City must look to transit and traffic management improvements.
- Declining population - Present downtown population is less than that of 20 years ago. This results in underutilized community facilities, an unlively downtown, and increased travel demands.
- Natural Environment - Downtown is a major contributor to air pollution in the region, mainly caused by its high automobile usage. Other concerns are overflow of storm drains and sewers to Elliot Bay.
- Energy - Increased energy demand, a result of downtown growth, has caused concerns about the adequacy of present supply systems.

Overall Growth Policy

The Seattle downtown shall be compact and accessible. It shall remain as the center of the region by accommodating a large share of the region's business, financial, cultural and retail developments. Transportation capacity is a major indicator for revealing the amount of suitable growth. However, the assumption behind most existing policies is that the transportation system can be expanded or improved to accommodate growth. Growth may take place as long as the adverse impacts associated with new developments can be mitigated.

SEATTLE

Relationship of CBD and Regional Transportation System

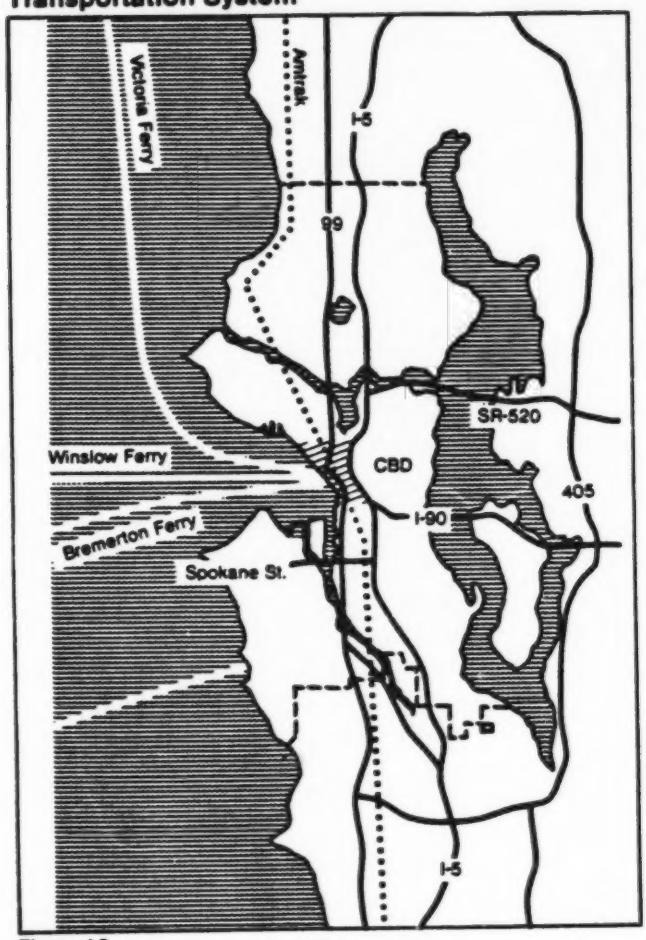


Figure 18

SOURCE : BACKGROUND REPORT OF THE DOWNTOWN LAND USE & TRANSPORTATION PROJECT. SEATTLE OFFICE OF POLICY & EVALUATION. MAR 1981

SEATTLE

Figure 42

SOURCE: BACKGROUND REPORT OF THE DOWNTOWN LAND USE & TRANSPORTATION PROJECT. SEATTLE OFFICE OF POLICY & EVALUATION. MARCH 1981

Employment Growth

Between 1974 and 1979, downtown had 47-53% of metropolitan office employment. In 1975, the downtown had almost 17 million square feet of office space; and in 1982, this is expected to increase to 23.5 million. Office employment is increasing in relative importance to other sectors. In 1973, offices had 68% of total downtown employment; and in 1981, it is estimated to be a 75% share. It has been indicated that downtown employment growth will not be discouraged, but will be directed to locate at places where there is transportation and public infrastructure facilities to support that growth. Over the next 15 to 20 years, downtown employment is expected to increase 70%.

Housing

The downtown population had been decreasing for the past two decades until just recently. According to "Goals for Seattle 2000", adopted by Council in 1973, increasing residential development in the downtown is the key goal. It is stated policy that the existing supply of low and moderate income housing be maintained through preservation and new construction. 91% of the existing downtown population belongs in the low income group. Although future development trends indicate there will be increases in moderate and upper income housing, existing low income housing will be maintained and will still constitute a high proportion of the residential stock.

The percentage of people living and working in the city dropped from 71% in 1960 to 60% in 1970, and to 55.8% in 1975. In 1975, 55.2% of people from outside of the city commute to the downtown to work. These trends suggest that for the past two decades people have been living further away from their places of employment. The resultant city pattern is a high concentration of employment in the downtown and spread out residential development in the suburbs. This pattern tends to increase travel demand for trips between downtown/city and the rest of the region. The policy adopted to encourage housing in the downtown is to partly address the problem of reducing the distance between home and employment, consequently, reducing aggregate travel demand.

Transportation

Existing transportation facilities serving downtown Seattle are highways, roads, buses, commuter trains and ferries. The transit ridership for peak hour travel is 40% for 1980, compared to 25% in 1960.

According to the projected downtown employment growth of 70% over the next 15 to 20 years, travel demand could increase at a similar rate, given that the ratio of employment to labour force is not altered significantly. This means that present congestion period in the downtown of 60-90 minutes likely will be lengthened.

The transportation implications of future development are significant concerns for the city, and are recognized as a major constraint for determining the suitable amount of growth. Existing policies assume that transportation systems, primarily transit, could be expanded to accommodate this growth. The focus is being put on transit improvements, like building bus malls and terminals, and car pools, whereas growth in auto usage is to be constrained. Transit ridership must be increased to 50-60% in order to handle additional travel demand resulting from the projected growth over the next 15 to 20 years.

Present Land Use Controls and Zoning Tools

Floor Area Ratio (FAR)

- ranges from 2.5 to 10
- higher with bonus, could go up to 18 for commercial
- the present FAR maximum of existing buildings in the city is at 20

Bonus System

A) There are non-residential (commercial) bonuses on density for the provision of amenities, retail, plaza, etc.

B) There are residential use bonuses for the provision of community facilities, amenities, etc.

Transfer of Development Rights (TDR)

- The TDR is restricted within a given block
- Potential bonuses cannot be transferred
- The TDR is mainly used for preserving historic buildings and old housing

General

- there are no height restrictions in general zoning regulations, except in historic areas
- there are no design controls for outright commercial development, though there are some controls for mixed use development
- the provision of amenities is not mandatory, but is encouraged through the bonus system
- demolitions are prohibited for designated landmarks

State Environmental Protection Act (SEPA)

SEPA was implemented in 1975 by the state of Washington. It regulates the quality of air, water, flora, fauna, noise, traffic and parking, housing and population characteristics that could result from any proposed development. Only certain developments require this environmental review. These are developments which are over 4,000 square feet, which have over 4 residential units, are planned unit developments, conditional uses, or require rezoning. Developments causing critical concerns which cannot be resolved by SEPA will have to go through Environmental Impact Assessment (EIA). EIA involves a more detailed study of parking and traffic conditions, view protection, light and glare, shadow on public parks, and cumulative effects on utilities and services.

SEPA has been a rather effective tool for mitigating the negative impacts of proposed developments. It does not necessarily discourage growth but it functions as a guideline for the private sector to provide necessary amenities or to mitigate undesirable impacts.

Strategies/Programs

The strategies or programs that have been or will be used to implement the policies mentioned earlier are:

1) Employment growth (mainly office) - It is not the intent of the city to discourage office growth in downtown but guidelines for development have been provided.

   . Future office growth development should be located where public infrastructure is available, and where the transportation system can handle increased travel demand. If new development requires expansion to the existing public infrastructure, the developer should be responsible for such provisions.

2) Encouragement of downtown housing

   . The bonus system grants a higher FAR to commercial developments which incorporate housing.

   . In the downtown, some lands have been rezoned to residential uses, although most housing will occur in mixed use zones.

3) Expansion of the transportation system with policies that are transit oriented

   . Transit malls for electric shuttle vehicles on a pedestrian priority mall.

   . Bus terminals (for 1985).

   . Expand ferry service and terminals.

- Construction of transit tunnels running the length of downtown for future regional systems.

- Promote ridesharing, variable working hours and pedestrian circulation within CBD.

- Restrict parking by allowing short-term parking around retail activities, and by directing long-term parking away from the high density core and pedestrian oriented streets.

Outcome of Programs

A new downtown plan is to be prepared and reviewed by Council in about 1983, to be followed by a citizen participation process. So far, policies and goals of the city have been based upon the "Goals for Seattle 2000", a 1973 project which consisted of opinions from Seattle residents and public officials. However with new trends and problems emerging, and possibly a new set of values, it is recognised that a new plan is needed for coping with changing situations.

Most of the policies and programs mentioned in this paper were adopted in 1981. It seems to be still too early to evaluate their effectiveness. According to an interview with a downtown Seattle Planner, the residential programs have been moderately successful in that housing and population in the downtown have been slowly increasing.

Most of the transportation programs are still in the planning stage, but it has been indicated that all future development plans should be based upon the assumption that the transit improvements will materialize.

With regard to the office development policy, no specific implementable strategies or conditions have been set for requiring the private sector to pay for additional public infrastructure. Present policy, however, may act as an incentive for the private sector to locate developments accordingly.

ACKNOWLEDGEMENTS

The author would like to thank the following people for their information and help.

Larry Polek	Calgary City Planning Department
Susan Chibuk	Edmonton City Planning Department
Cathy McDonald	Toronto City Planning & Development
Tom Ostler	Toronto City Planning & Development
Johnny Carline	Formerly with Toronto City Planning
Doug Goedert	Denver Planning Office
Joseph Chow	Houston Housing Planning Department
John Burgh	Minneapolis Planning Department
Rod Oahiza	Portland Bureau of Planning
Christopher Kopca	Portland Development Commission
George William	San Francisco Planning Department
Lu Blacej	San Francisco Planning Department
Gary Lauritsen	Seattle Office of Policy Evaluation

POOR

QUALITY

ORIGINAL